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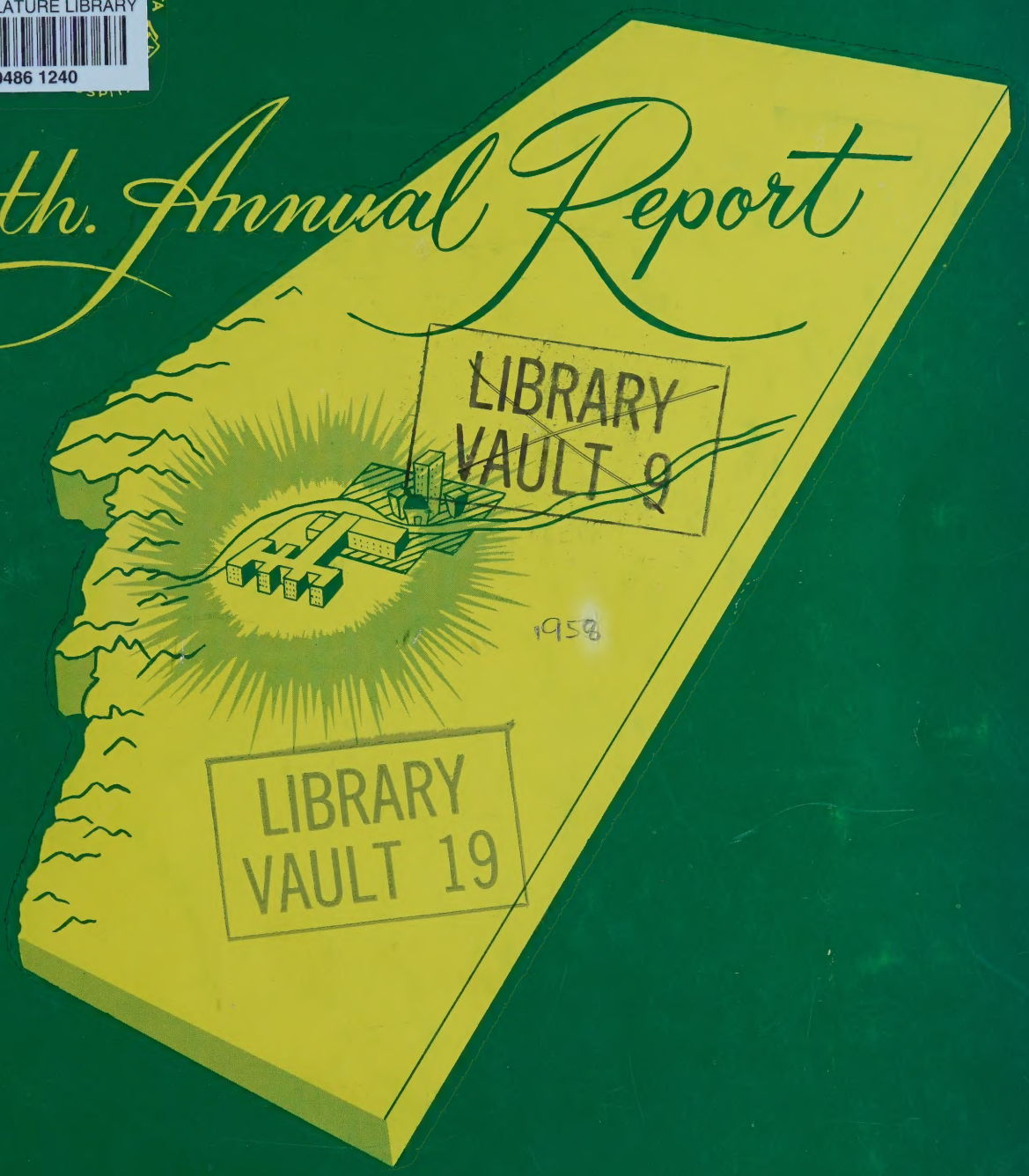
36th. Annual Report



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Thirty Sixth annual report

FOR THE YEAR ENDING DECEMBER 31, 1958

DEDICATION

To all those who have served and are serving the cause of health through the medium of the University of Alberta Hospital, this report is dedicated.

A. C. McGUGAN, M.D.,
Superintendent.

administration

Dr. A. C. McGugan	*Superintendent*
Dr. B. Snell	*Assistant Medical Superintendent*
Mr. L. R. Adshead	*Business Administrator*
Mr. G. Sherwood	*Assistant Business Administrator*
Dr. W. C. MacKenzie	*Dean of the Faculty of Medicine*
Dr. M. R. Marshall	*Chairman, Committee on Graduate Training*
Dr. A. S. Little	*Chairman, House Staff Committee*
Dr. W. C. MacKenzie	*Director, Department of Surgery*
Dr. D. R. Wilson	*Director, Department of Medicine*
Dr. J. R. Vant	*Director, Department of Obstetrics and Gynecology*
Dr. M. R. Marshall	*Director, Department of Ophthalmology and Otorhinolaryngology*
Dr. K. A. Yonge	*Director, Department of Psychiatry*
Dr. J. K. Martin	*Director, Department of Pediatrics*
Dr. J. W. Macgregor	*Director, Department of Pathology*
Dr. R. E. Bell	*Director, Department of Clinical Laboratory Services*
Dr. H. E. Duggan	*Director, Department of Radiology*
Dr. E. A. Gain	*Director, Department of Anesthesiology*
Dr. M. T. F. Carpendale	*Director, Department of Rehabilitation*
Dr. R. H. MacLean	*Director, Department of Dentistry*
Dr. F. G. Ramsay	*Senior Treatment Medical Officer, D.V.A.*
Miss J. S. Clark	*Director of Nursing*
Mr. W. W. Maday	*Director, Pharmaceutical Services*
Miss J. G. Nairn	*Medical Records Librarian*
Mrs. S. Philip	*Medical Social Service*
Miss M. Price	*Admitting Officer*
Mr. J. Pedden	*Personnel Director*

Her Majesty Queen Elizabeth and His Royal Highness The Duke of Edinburgh visit the Mewburn Pavilion—July 1959

REPORT OF THE SUPERINTENDENT

Mr. D. J. Avison,

Chairman,

University of Alberta Hospital Board

Sir:

I have the honour to submit this, the thirty-sixth annual report, covering the operation of the University of Alberta Hospital for the year ended December 31, 1958. This report is designed for submission early in 1960. This year our fiscal year has been changed from the year ending March 31st to the year ending December 31st. As a result, our annual report is more outdated than usual. In order that some of the events recorded may not be too outdated, certain incidents are reported up to the date of compilation of this report (December 1, 1959).

PERSONNEL OF THE HOSPITAL BOARD

Personnel of the Hospital Board:

The personnel of the Hospital Board has changed materially during the year. Dr. Andrew Stewart, President of the University of Alberta, has been replaced by the newly-appointed President, Dr. Walter H. Johns. Dr. J. W. Scott, Dean of the Faculty of Medicine, has been replaced by the newly-appointed Dean, Dr. Walter C. MacKenzie. Mr. F. Stewart has been promoted to the rank of Deputy Provincial Treasurer, and has been replaced by Mr. J. M. Currie, Assistant Deputy Provincial Treasurer.

DEATHS AMONG STAFF MEMBERS

Deaths Among Staff Members:

We regret to report the deaths of Dr. A. C. Rankin, a former Dean of the Faculty of Medicine at the University of Alberta, who was an Honorary member of our staff; and Dr. W. P. Calhoun of the Department of Dentistry.

APPOINTMENTS AND RESIGNATIONS

Appointments and Resignations:

APPOINTMENTS:

The following appointments have been made during the year:

J. D. M. Alton—B.Sc., M.Sc., M.D. (Alberta); Spec. Cert. Pl. Surg. R.C.P.S.(C): F.R.C.S.(C)—Surgery (Plastic)

H. M. Barker—B.Sc. (Manitoba); M.D. (U.W.O.): L.M.C.C.: D. Psych. (Toronto): Spec. Cert. Psy. R.C.P.S.(C)—Psychiatry

D. I. Buchanan—M.B., Ch.B. (Glasgow): M.D.: D.P.H.—Clinical Laboratory Services

D. J. Campbell—B.Sc. (Alberta): M.S., Ph.D. (Purdue)—Consultant, Clinical Laboratory Services

R. B. Devlin—M.D. (Manitoba): Spec. Cert. Paed. R.C.P.S.(C)—Paediatrics

W. Forster—M.B., B.S. (Durham): L.R.C.P. (Edinburgh): L.R.C.S. (Edinburgh): L.R.F.P. & S.G.: D.P.M. (London): Spec. Cert. Psy. R.C.P.S.(C)—Psychiatry

J. R. Hemstock—B.Sc., M.D. (Alberta): L.M.C.C.: D.A. (McGill): Spec. Cert. Anaes. R.C.P.S.(C)—Anaesthesiology

J. R. Hilliard—M.D. (Toronto): L.M.C.C.: F.R.C.P.(C)—Medicine (Internal)

Z. Hoar—B.Sc., M.D. (Alberta): L.M.C.C.: Spec. Cert. Anaes. R.C.P.S.(C)—Anaesthesiology (Courtesy)

J. R. Huckell—B.Sc. (Alberta): M.D., C.M. (McGill): F.R.C.S.(C)—Surgery (Orthopaedic)

W. S. Murray—D.D.S. (Alberta)—Dentistry

H. Pascoe—B.A., M.D. (Toronto): D. Psych. (Toronto): Spec. Cert. Psy. R.C.P.S.(C)—Psychiatry

A. F. Phillips—B.A. (Cambridge): M.A. (Cantab.): M.B., Ch.B. (Edinburgh): M.D. (Edinburgh): D.M.R.T. (R.C.P. London & R.C.S. England)—Consultant, Radiology

H. F. W. Pribram—B.A., M.A. (Cambridge): M.B., B.Ch. (Cantab.): M.R.C.S.: L.R.C.P.: D.M.R.D.—Radiology

P. T. Quinlan—B.Sc., M.B., Ch.B. (Manchester): F.R.C.S. (Edinburgh): Spec. Cert. R.O.L. R.C.P.S.(C)—Otorhinolaryngology

R. E. Rossall—B.Sc., M.B., Ch.B., M.D. (Leeds): M.R.C.P. (London): F.R.C.P.(C)—Medicine (Internal)

B. J. Sproule—B.Sc., M.D., M.Sc. (Alberta): L.M.C.C.: Spec. Cert. Int. Med. R.C.P.S.(C): F.R.C.P.(C)—Medicine (Internal)

W. A. Strutz—B.A. (Saskatchewan): M.D. (Alberta): L.M.C.C.: F.R.C.S. (C): Spec. Cert. Gen. Surg. (R.C.P.S.(C)—General Surgery (Courtesy)

A. R. Urschel—D.D.S. (Alberta)—Dentistry

H. T. G. Williams—M.B., Ch.B. (Liverpool): F.R.C.S. (England): F.R.C.S.(C)—Surgery (General)

RETIREMENTS:

Dr. S. M. Scott—Department of Veterans' Affairs

ROYAL VISIT

Royal Visit:

The year 1959 will be a memorable one in the history of the University of Alberta Hospital in that we were honoured by a visit from Her Majesty, Queen Elizabeth II, and His Royal Highness, Prince Philip, to the Colonel Mewburn Pavilion, in which veterans of the two latest World Wars are treated.

SPECIAL SERVICE DEPARTMENTS

Special Service Departments:

The Hospital Board and the Administration are continuing their long-established policy of recognizing patient service as a threefold function, namely: direct patient service, and service to the patients of tomorrow in the form of teaching and research. Some special interest in teaching and research is a prerequisite to medical appointments on the staff.

In the special service areas, the Board has approved the inauguration of an Emotionally-disturbed Children's unit. All other phases of the Department of Psychiatry have been continued and expanded.

The cardiology and cardiac surgery teams are continuing to obtain dramatic results.

The special services which we had previously established have become increasingly active. Particular reference might be made to such services as the metabolic, pulmonary function, radioisotope, electroencephalographic, and ultramichrochemistry.

OUT-PATIENT DEPARTMENTS

Out-Patient Departments:

The hospital operates several out-patient departments, both on the hospital premises and in the city center area at the Alberta-Jasper Building. 1960 will see a new out-patient department on the University Hospital premises.

EMERGENCY DEPARTMENT

Emergency Department:

The Emergency Department continues to grow with the phenomenal growth of Edmonton and the increased industrialization. Presently the department treats about 125 patients in a 24-hour day.

TRAINING AND RESEARCH

Training and Research:

RESEARCH:

The hospital continues to receive large grants of money for research from many sources. In research, as in any other service, it is the men and women who attract the money and give the hospital its reputation. A number of outstanding individuals on our staff have attracted research grants from governmental, voluntary aid, and philanthropic groups. References to addresses, publications, and research projects are to be found elsewhere in this report.

MEDICAL STUDENTS

MEDICAL STUDENTS:

A large part of the academic instruction in medicine in the two senior undergraduate years, and a large number of clinics, are offered in the hospital. Within the next two years it is expected that all instruction in the two senior years of medicine will be given in the hospital. It is also expected that a teaching and research building will be provided as presently-existing hospital space has been pressed beyond its limit in an attempt to provide space for teaching and research.

TEACHING AT THE MEDICAL GRADUATE LEVEL

TEACHING AT THE MEDICAL GRADUATE LEVEL:

The University of Alberta Hospital has been approved by The Royal College of Physicians and Surgeons of Canada for the training of medical graduates in all specialties. Many practitioners, after a few years in general practice, return to take one of these courses. The duration of the courses is five years, and the courses are designed to enable those taking them to qualify for Certification or Fellowship examinations in The Royal College of Physicians and Surgeons of Canada.

NURSING

NURSING:

Our nurses' residence is now completely adequate without being extravagant. There is dormitory accommodation for about 400 students. We plan to graduate 120 nurses per year. The teaching staff in our training school for nurses has an establishment of 20 full-time teachers.

THOSE SERVED

Those Served:

A few years ago some 60% of our admissions were from outside the City of Edmonton. Presently our admissions are made up of about 51% from outside the City of Edmonton, and 49% from the City itself. Approximately 90% of the patients admitted to this hospital are referred to members of the attending staff. These referred cases have been referred because they present special problems in diagnosis and treatment.

The University of Alberta Hospital continues to operate the Colonel Mewburn Pavilion for the Federal Department of Veterans' Affairs, and provides all services for that unit except medical services. The medical services are provided by the Department of Veterans' Affairs through members of our staff.

It is expected that in 1960 the new service building will be in full operation. This new building will not provide any material number of additional beds, but it will bring our services up to the standard which one might expect in a 1200-bed hospital. The wing will contain the Medical Records Department, Out-Patient and Emergency Departments, Clinical Laboratories, and will also house the X-ray Department and the Operating Suites.

VOLUNTARY AID

Voluntary Aid:

The Administration wishes to express appreciation for the large amount of voluntary aid received during the year. While it is difficult to enumerate all the groups which have provided assistance to the hospital, we wish to acnowledge the very material assistance received from our hospital Women's Auxiliary in the care, teaching, and entertainment of patients.

The number of long-term poliomyelitis patients in the hospital has increased, and the Alberta Division of the Canadian Foundation for Poliomyelitis has continued to assist these patients.

We wish to express our sincere thanks to Mr. and Mrs. Merrill D. Muttart for their donation of a Wurlitzer organ to be placed in the chapel of the new service wing, and also for the many other expressions of their kindly interest in the hospital.

The gift of a mock-up bus by the Edmonton Transit System is very much appreciated in our Rehabilitation Department.

We also wish to acknowledge services, gifts, donations and entertainment contributed by: The Junior Hospital League, Voluntary Services Bureau, Army and Navy Women's Auxiliary, The War Amputee Association, L.O.B.A. Western Rose, L.O.B.A. Strathcona No. 138, Ukrainian Catholic Goodwill Club, Edmonton Women's Liberal Club, Metropolitan United Church Ladies' Group, The Salvation Army, Ladies' Auxiliary to the Canadian Legion (Montgomery Branch No. 24, Strathcona and Provincial Command Branches), Kingsway Legion, Montgomery Legion, Silver Cross Mothers, Garneau United Church Group, I.O.D.E. (Earl of St. Andrew's, Bardia, Beaver and Borden Chapters), The Canadian Red Cross Society, St. Patrick's Women's League, Army, Navy and Air force Veterans' Auxiliary, 20th Century Club, Heavener School of Dancing, Kinsmen and Kinettes, The Council of Jewish Women, Central Friendship Club, Airport Greenhouses, Calenso's Floral Co., Kerrison Flowers Ltd., Virginia Park Greenhouses, A.C.T. Auxiliary, The Women's Institute of Mulhurst, Joyeux Noel Club, Shriners' Organization, and the Edmonton Federation of Community Leagues. As in previous years the Theatre Managers' Association and the Edmonton Eskimo Football and Baseball Clubs have donated many seats to games for patients during the year.

The University of Alberta School of Nursing Alumnae has continued in its work for graduate and student nurses of the hospital.

Many other donations and services too numerous to mention have been donated by individuals and organizations in the city and all have been fully appreciated. No doubt we have failed to acknowledge help from a number of sources. For such omissions we apologize.

VISITORS

Visitors:

The hospital was pleased to welcome the following distinguished visitors during the year:

Dr. McElvey, Senior Leprosy Control Officer, Ghana Medical Service

Dr. D. W. Logan, Chancellor of the University of London, England

Dr. Martin Roth, Professor of Psychiatry, Durham University, England

Mr. Ronald W. Raven, Surgeon, Royal Marsden Hospital, London, England

Dr. Francis Stock, Professor of Surgery, Hong Kong University

Professor J. P. Hubbard, Department of Public Health and Preventive Medicine, University of Pennsylvania

Professor E. J. Wayne, Sims Travelling Professor for 1959; Regius Professor of the Practice of Medicine, University of Glasgow, Scotland

It affords me pleasure to acknowledge the help which I have received from the Members of the Hospital Board, and the loyal cooperation which I have received from all professional and lay departments of the hospital. The loyalty of the members of our staff throughout the years has made it possible for us to attain our present standards of service.

All of which is respectfully submitted.

A. C. McGugan, M.D.,

Superintendent.

FINANCES

OUR MAIN SOURCES OF INCOME

Federal Government on behalf of D.V.A. and D.N.D. patients	$ 507,800.00
Provincial Government—direct hospitalization payments	128,000.00
Federal-Provincial Hospitalization Plan	2,354,700.00
Private and Semi-Private differentials	157,000.00
Other Sources—Private patient revenue, W.C.B., Blue Cross, Private Insurance	776,418.00
	$ 3,923,918.00

OUR PRINCIPAL DISBURSEMENTS

Payroll	2,647,000.00
Food	350,603.00
Medical Supplies	545,023.00
Maintenance including Light, Heat and Water	252,900.00
Miscellaneous	85,597.00
	$ 3,881,123.00

PRINCIPAL ASSETS OF THE HOSPITAL

Cash on hand and in Bank	700,300.00
Inventories	234,000.00
Accounts Receivable—less provision for doubtful accounts	706,600.00
Plant Funds—including land, buildings and equipment	12,710,000.00

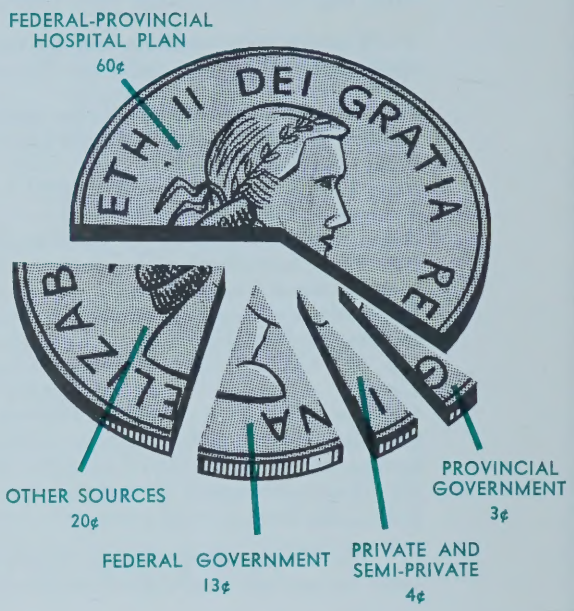
CURRENT LIABILITIES

Trade Accounts—Salaries and Wages due	269,000.00
Advance for working Capital	147,000.00
Interest Payable on Capital Advance	223,000.00

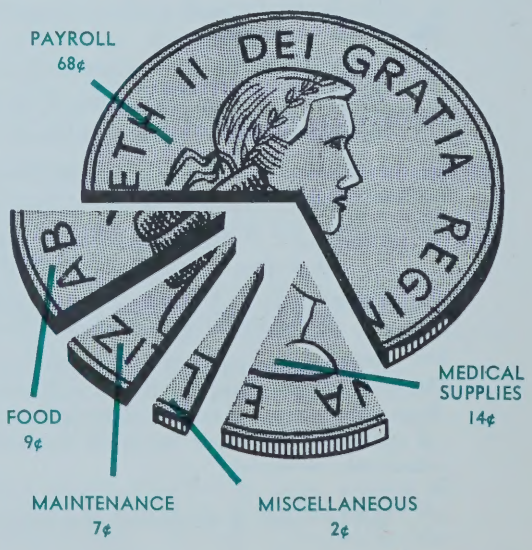
SOURCE OF CAPITAL FUNDS

Province of Alberta	10,539,000.00
University Hospital	1,674,000.00
Federal Government	659,000.00

WHERE OUR DOLLAR COMES FROM



WHERE OUR DOLLAR GOES



Mr. D. J. Avison,
Chairman,
University Hospital Board

REPORT OF THE BUSINESS ADMINISTRATOR

Sir:

I herewith submit financial report of the nine months ended December 31st, 1958.

COMPARATIVE STATEMENT OF DISBURSEMENTS

	Years Ended			(9 mos.)
	Mar. 31, 1956	Mar. 31, 1957	Mar. 31, 1958	Dec. 31, 1958
Payroll	2,101,600	2,312,700	2,922,000	2,647,000
Food	383,800	397,100	394,000	350,603
Medical Supplies	476,800	516,500	663,000	545,023
Plant Maintenance, excluding depreciation	219,268	219,432	289,903	252,900
Miscellaneous	102,700	105,200	129,400	85,597

PERCENTAGE OF HOSPITAL DOLLAR EXPENDED

Payroll	64	65	66	68
Food	12	11	09	09
Medical Supplies	14	15	15	14
Plant Maintenance	07	06	07	07
Miscellaneous	03	03	03	02

It will be noted that the period reported on is for nine months instead of a full fiscal year. This was necessitated by the change of fiscal period which formerly conformed to the provincial government fiscal year ending March 31st, and has now been changed to conform to the fiscal period of all other hospitals in the province. This period also represents the first nine months of operation under the Federal-Provincial Hospitalization Plan.

Revenue

While formerly the Provincial-Municipal Hospitalization Plan provided 15% of total revenue, the new Federal-Provincial Plan provides 60%. Revenue from D.V.A. patients decreased to 13% and direct Provincial Government payments covered 3%. The hospital still receives 4% from Private and Semi-Private differentials and 20% from sources other than Federal or Provincial Governments.

Expenditure

As depreciation has now been eliminated as a recoverable cost under the Hospitalization Plan, it has been eliminated from Plant Maintenance in comparing the four fiscal periods. The proportion of total expenditure required to cover payroll continues to increase and in this period equalled 68%.

Construction continues on the Clinical Services building and planning continues on the Laundry and Maintenance building. The opening of the Clinical Services building which is expected in 1960 will relieve the pressure on Operating Room, X-Ray and Clinical Laboratories but will put an added burden on the Laundry. It is most urgent that the Laundry and Maintenance building be constructed at the earliest possible date. Planning is also continuing on the renovation of the 1912 building and the construction of a sixth floor on the 1912 and 1930 buildings.

May I say a sincere word of thanks to the Hospital Board, the Directors of the Clinical Departments and the heads of all hospital departments, members of the staff of Department of Public Works and the Department of Public Health for their assistance and cooperation in solving the many problems of administration during the past year.

Respectfully submitted,

L. R. Adshead,
Business Administrator

STATISTICAL REVIEW 1958

ADMISSIONS:	
Total	22,087
Private	922
Semi-Private	3,975
Public	11,686
O.P.D.	837
D.V.A.	835
Staff	320
Others	3,512
SEX:	
Male	11,180
Female	10,907
RELIGION:	
Protestant	6,019
Roman Catholic	4,215
United Church	3,906
Presbyterian	770
Church of England	2,572
Lutheran	1,462
Others	3,143
NATIONALITY:	
British Isles	2,244
Canada	15,965
U.S.A.	1,203
Others	2,675
BY DEPARTMENT:	
Medical	5,165
Surgical	3,691
Obstetrical	2,160
Gynaecological	1,561
E.E.N. & T.	1,430
Orthopaedic	2,004
Dermatology	160
Neuro-Surgery	484
Paediatrics	1,392
Metabolic	438
G. U.	1,088
Cardiology	500
Others	2,014
Maximum Admissions any one day	98
Minimum Admissions any one day	12
Maximum Discharges any one day	130
Minimum Discharges any one day	10
Maximum in Hospital any one day	1,109
Minimum in Hospital any one day	611
Number of patients on hand at beginning of year	650
Total number of patients deceased during year	553
Total number of patients on hand at end of year	750
Total number of patient days	322,075
Daily average number of patients	882
Average stay of patient	14.6
X-RAY DEPARTMENT:	
Radiographs (films)	86,100
Radiographs (examinations)	33,281
Fluoroscopies	3,853
X-Ray Treatments	2,854
LABORATORY DEPARTMENT:	
Examinations	231,704
B. M. R.'s	778
E. C. G.'s	5,247
Total	237,729
OPERATIONS:	
Total	10,377
Major	3,288
Minor	3,738
Genito-Urinary	3,351
OUTPATIENT TREATMENTS	85,667

REPORT OF THE PRESIDENT, MEDICAL STAFF

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital.

Sir:

It is my privilege to submit the annual report from the Executive of the Medical Staff.

The general staff meetings were held on the first Monday of each month for the purpose of transacting the business of the staff and to present brief scientific papers of general interest to the staff. These meetings were well attended, and the following papers were presented:

January—Some Current Medical Problems of High Altitude Flight—Dr. J. W. Pearce

February—Control of Rheumatic Fever—Drs. W. C. Taylor, N. Duncan, A. Stewart, R. Fraser, and J. Dvorkin.

March—The transplantation of Bone Marrow—Dr. G. O. Bain

April—Teaching Psychotherapeutic Medicine—Dr. K. A. Yonge

May—Experimental Production of Portal Hypertension—Dr. P. B. R. Allen and Experimental Production of Peptic Ulcer—Dr. O. Silbermann

June—Estimation of Extracellular and Intracellular Water Volume—Dr. L. E. McLeod

September—Report on Sectional Meeting of the American College of Surgeons in Stockholm, Sweden—Dr. G. L. Willox

October—The Myopathies—Dr. G. Monckton

November—The Third World Congress on Cardiology in Brussels, Belgium—Drs. R. S. Fraser and J. Dvorkin

December—Review of Gastric Ulcers in the University Hospital 1948-52—Dr. W. J. Buie

The Executive of the Staff, in conjunction with the Chairman of the Records and Tissue Committees, met on the third Monday of each month to discuss the various problems of the medical staff and subjects to be presented to the Medical Advisory Board, or to be reported at the general staff meetings. In addition the Executive reviewed the monthly reports of deaths and complications received from the Departments of Surgery, Medicine, and Obstetrics and Gynaecology.

During the past year the medical staff has established an award in the final year of nursing to be called the Strathcona Prize. This prize will be awarded in Medicine, Surgery, Obstetrics and Gynaecology, and Psychiatry.

Respectfully submitted,

B. MICHALYSHYN, M.D.,
President of the Medical Staff

MEDICAL

ACTIVE STAFF

INDOOR APPOINTMENTS

Department of Medicine

(Director—DOCTOR D. R. WILSON)

Division of Internal Medicine

D. R. WILSON, B.A. (Oxford); M.D., C.M. (McGill); L.M.C.C.; F.R.C.P.(C); Spec. Cert. Int. Med. Alberta; F.A.C.P.

D. M. BELL, B.A., M.D. (Alberta); L.M.C.C.; Spec. Cert. Int. Med. R.C.P.S.(C)

G. I. BELL, B.Sc., M.D. (Alberta); L.M.C.C.; F.A.C.P.; Spec. Cert. Int. Med. R.C.P.S.(C) and Alberta.

M. M. CANTOR, B.Sc., M.D. (Manitoba); L.M.C.C.; F.A.C.P.; Spec. Cert. Int. Med. R.C.P.S.(C) and Alberta.

E. F. DONALD, M.D. (Alberta); L.M.C.C.; Spec. Cert. Int. Med. R.C.P.S.(C) and Alberta.

J. DVORKIN, M.D. (Alberta); L.M.C.C.; Spec. Cert. Int. Med. R.C.P.S.(C) and Alberta.

J. F. ELLIOTT, B.A., M.D. (Alberta); L.M.C.C.; F.R.C.P.(C); Spec. Cert. Int. Med. R.C.P.S.(C) and Alberta; F.A.C.P.

R. S. FRASER, B.Sc., M.D. (Alberta); L.M.C.C.; M.Sc. (Bio.); F.R.C.P.(C).

J. A. L. GILBERT, M.B., Ch.B., M.D., F.R.C.P. (Edinburgh); M.R.C.P. (London); F.R.C.P.(C); Spec. Cert. Int. Med. R.C.P.S.(C); F.A.C.P.

S. E. GREENHILL, M.D. (Toronto); L.M.C.C.; D.P.H.; Spec. Cert. Int. Med. R.C.P.S.(C); F.A.C.P.; Fellow in Industrial Medicine.

K. A. HAMILTON, B.A. (Toronto); B.A., B.M., B.Ch. (Oxford); M.R.C.P. (London); F.R.C.P.(C); Spec. Cert. Int. Med. and Psych. Alberta; F.A.C.P.

E. G. KIDD, B.Sc., M.D. (Alberta); L.M.C.C.; Spec. Cert. Int. Med. R.C.P.S.(C).

A. S. LITTLE, M.D. (Manitoba); L.M.C.C.; F.R.C.P.(C).

L. E. McLEOD, B.Sc., M.D. (Alberta); L.M.C.C.; M.Sc. (McGill); F.R.C.P.(C); Spec. Cert. Int. Med. R.C.P.S.(C) and Alberta; Markle Scholar. Med. Sc.

G. MONCKTON, M.B., B.S.; M.R.C.S.; L.R.C.P.; M.D. (London); M.R.C.P. (London); F.R.C.P.(C).

F. B. RODMAN, B.Sc., Pharm.; B.Sc., M.Sc., Ph.D. (Minnesota); M.D. (Alberta); L.M.C.C.; Spec. Cert. Int. Med. R.C.P.S.(C).

J. W. SCOTT, M.D., C.M. (McGill); L.M.C.C.; F.R.C.P.(C); Spec. Cert. Int. Med. R.C.P.S.(C); F.A.C.P.

P. H. SPRAGUE, M.D. (Alberta); M.S. (Minnesota); L.M.C.C.; F.A.C.P.; Spec. Cert. Int. Med. R.C.P.S.(C) and Alberta; Dipl. Amer. Bd. Int. Med.

R. K. THOMSON, B.Sc., M.D. (Alberta); L.M.C.C.; Spec. Cert. Int. Med. R.C.P.S.(C) and Alberta; F.A.C.P.; Spec. Cert. Psych. Alberta.

Division of Dermatology

P. L. RENTIERS, B.A., M.D. (Alberta); L.M.C.C.; M.S. (Minnesota); Spec. Cert. Derm. and Syph. R.C.P.S.(C).

Department of Surgery

(Director—DOCTOR W. C. MacKENZIE)

Division of General Surgery

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F. D. CONROY, M.D. (Alberta); L.M.C.C.; Spec. Cert. Urol. R.C.P.S.(C) and Alberta.

G. R. DAVISON; M.D., C.M. (Queen's); L.M.C.C.; Spec. Cert. Int. Med. (Tbc.) R.C.P.S.(C).

W. J. DOWNS, B.A. (Alberta); M.D., C.M. (McGill); L.M.C.C.; Spec. Cert. Int. Med. (Tbc.) R.C.P.S.(C)

E. F. FOY, B.Sc., M.D. (Alberta); L.M.C.C.; Spec. Cert. Ophthl. R.C.P.S.(C) and Alberta.

Z. HOAR, B.Sc., M.D. (Alberta); L.M.C.C.; Spec. Cert. Anaes. R.C.P.S.(C).

J. C. McPHERSON, B.A., M.D. (Alberta); L.M.C.C.

J. P. MOREAU, B.A., M.D. (Alberta); L.M.C.C.; F.R.C.S.(C); Spec. Cert. Orth. Surg. Alberta; F.A.C.S.; Dipl. Amer. Bd. Orth. Surg.

L. P. MOUSSEAU, B.A., M.D. (Montreal); L.M.C.C.; F.A.C.S.; F.I.C.S.; Spec. Cert. Gen. Surg. R.C.P.S.(C) and Alberta; LL.D. (Hon.) (Montreal); LL.M. (Hon.) (Laval).

R. F. NICHOLLS; M.D., C.M. (Queen's); Spec. Cert. O. & O.R.L. R.C.P.S.(C) and Alberta.

R. POIRIER, B.A., M.D. (Montreal); L.M.C.C.; Spec. Cert. Paed. R.C.P.S.(C).

F. G. RAMSAY, M.D. (Manitoba); L.M.C.C.

H. H. STEPHENS, M.D. (Alberta); L.M.C.C.; Spec. Cert. Int. Med. (Tbc.) Alberta.

W. A. STRUTZ, B.A. (Saskatchewan); M.D. (Alberta); L.M.C.C.; F.R.C.S.(C); Spec. Cert. Gen. Surg. R.C.P.S.(C).

J. C. WARD, L.D.S., D.D.S. (Toronto).

N. W. WOYWITKA, M.D. (Alberta); L.M.C.C.; Spec. Cert. Ophthl. R.C.P.S.(C).

HONORARY APPOINTMENTS

N. E. ALEXANDER, M.D. (Alberta); L.M.C.C.; F.A.C.S.; Spec. Cert. Gen. Surg. Alberta.

J. E. CARMICHAEL, B.Sc., M.D., C.M. (Queen's); Spec. Cert. Anaes. R.C.P.S.(C) and Alberta; F.I.C.A.

H. H. HEPBURN, M.D., C.M. (McGill); L.M.C.C.; F.R.C.S. (Edinburgh); F.A.C.S.; F.R.C.S.(C); Spec. Cert. Neurosurg. Alberta.

C. V. JAMIESON, M.B. (Toronto); F.R.C.S.(C); Spec. Cert. O. & R.O.L. R.C.P.S.(C) and Alberta.

H. C. JAMIESON, M.B. (Toronto); F.R.C.P.(C); Spec. Cert. Int. Med. Alberta.

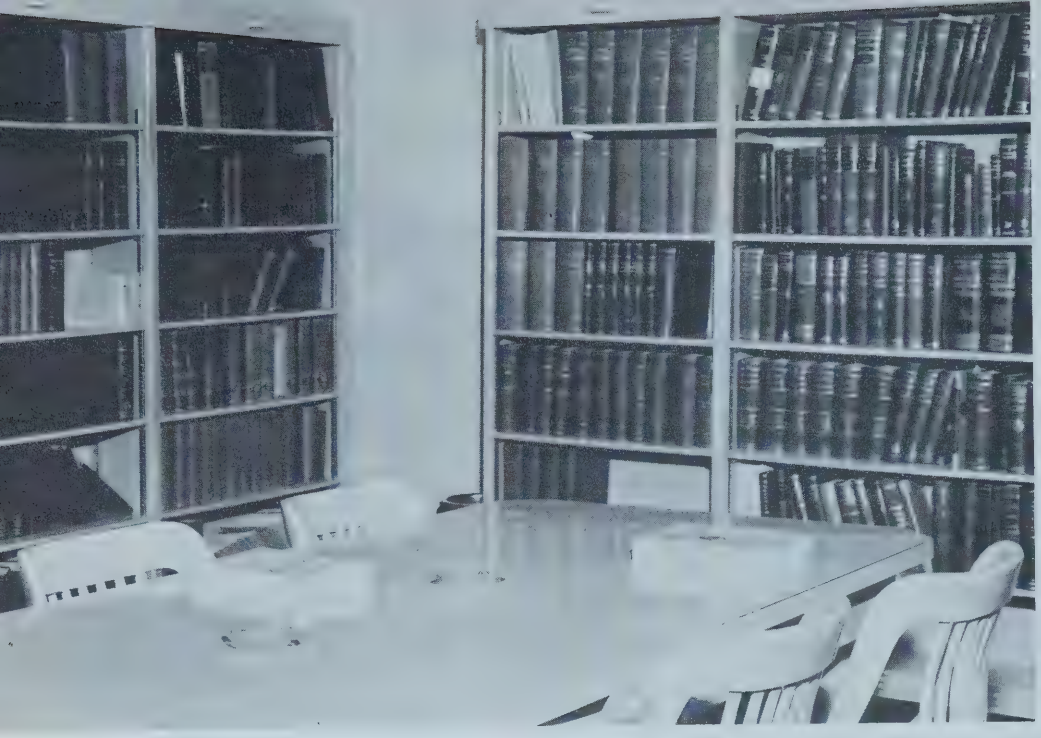
A. R. MUNROE, M.D., C.M. (McGill); F.R.C.S.(C); Spec. Cert. Gen. Surg. Alberta; F.A.C.S.

J. J. OWER, B.A., M.D., C.M. (McGill); F.R.C.P.(C); Spec. Cert. Bact. and Path. R.C.P.S.(C).

R. PROCTOR, M.D. (Manitoba); L.M.C.C.; Spec. Cert. Radiol. Med. Alberta.

R. M. SHAW, B.A. (Dalhousie); M.D., C.M.; D.P.H. (McGill); F.R.C.P.(C).

G. E. SWALLOW, M.D. (Manitoba); L.M.C.C.; Spec. Cert. Paed. R.C.P.S.(C) and Alberta.



A section of the Medical Library

Sun Deck—
House Staff Residence

HOUSE STAFF 1958-1959

SURGERY

RESIDENTS:
C. E. Abbott (Manitoba)
G. E. Edwards (Alberta)
M. H. W. Friedman (Alberta)
F. B. C. Gouws (Edinburgh)
C. C. Krause (McGill)

SENIOR ASSISTANT RESIDENTS:
W. J. Buie (Alberta)
R. B. Lyshak (Bonn, Germany)
W. Pisesky (Alberta)
J. Quirk (Welsh National School of Medicine)
E. J. Fitzgerald (Alberta)

JUNIOR ASSISTANT RESIDENTS:
P. B. R. Allen (Alberta)
J. M. Serbu (Alberta)
O. H. Silbermann (Alberta)

FELLOWS:
D. Cardozo (St. Louis, Missouri)—Cardiac Surgery
T. C. Eid (Toronto)—Basic Sciences
J. Gort (Alberta)—Basic Sciences
O. Retzer (Alberta)—Basic Sciences
S. T. Norvell (Illinois)—Teaching Fellow
H. G. T. Williams (Liverpool)—Cardiac Surgery

ANESTHESIA

RESIDENT:
J. F. Farley (Alberta)

SENIOR ASSISTANT RESIDENTS:
R. N. Eidem (Alberta)
J. M. Hagen (Edinburgh)
R. R. Spackman (Alberta)
J. B. Trudelle (Laval)

MEDICINE

RESIDENT:
R. H. Dougall (Alberta)

SENIOR ASSISTANT RESIDENTS:
D. R. Amies (Witwatersrand, Johannesburg)
T. K. Burnham (Guy's, London)
R. B. Coglon (Alberta)
I. H. Holmes (Manitoba)
M. Katayama (Alberta)
J. R. Weir (Alberta)

JUNIOR ASSISTANT RESIDENTS:
D. W. Irving (Alberta)
C. E. McDonnell (McGill)
M. A. Scott (Alberta)
O. Schaefer (Heidelberg, Germany)

FELLOWS:
W. C. Walters (McGill)—Endocrinology
J. T. Woods (Witwatersrand)

PSYCHIATRY

RESIDENT:
L. J. Laidlaw (Alberta)

SENIOR ASSISTANT RESIDENTS:
J. O'Carroll (Trinity College, Dublin)

JUNIOR ASSISTANT RESIDENTS:
A. J. Bennee (Witwatersrand, Johannesburgh)
S. G. Little (Alberta)
J. Thompson (Belfast)
J. B. Van Stolk (Cape Town)

OBSTETRICS AND GYNAECOLOGY

SENIOR ASSISTANT RESIDENTS:
D. W. J. Reid (Alberta)
N. R. Bertrand (Alberta)

PATHOLOGY

SENIOR ASSISTANT RESIDENT:
A. H. Christensen (Alberta)

JUNIOR ASSISTANT RESIDENTS:
W. J. McLuhan (Alberta)
P. W. Young (Toronto)

FELLOWS:
H. Bell (Alberta)
R. Swallow (Alberta)

PEDIATRICS

SENIOR ASSISTANT RESIDENTS:
B. Devlin (Manitoba)
G. M. Watkins (St. Andrew's)

JUNIOR ASSISTANT RESIDENTS:
J. A. Birkbeck (Edinburgh)
J. A. Reynar (Alberta)

CLINICAL LABORATORY SERVICES

RESIDENT:
J. H. Dickson (Westminster)

OPHTHALMOLOGY

RESIDENT:
R. L. Sutherland (Alberta)

MIXED JUNIOR ASSISTANT RESIDENTS

G. F. Bondar (McGill)
M. E. Chonko (Alberta)
D. E. Kirk (Alberta)
W. Pawluk (Alberta)
C. H. Stephen (McGill)
D. G. Young (Toronto)

INTERNS

R. C. Burton (Alberta)
S. W. Devine (Saskatchewan)
T. Enta (British Columbia)
C. J. Fairbanks (Alberta)
M. H. Finlayson (Edinburgh)
D. M. Gilmour (Alberta)
G. H. Gort (Alberta)
E. W. Gauk (Manitoba)
D. J. G. Greenhill (St. Mary's, London)
B. M. Henderson (Edinburgh)
A. Hrnchiar (McGill)
P. P. Lozeron (Geneva)
H. C. Meeker (British Columbia)
J. M. Miller (Edinburgh)
H. G. Morrish (Alberta)
R. T. Morrison (Alberta)
D. A. McLeod (Aberdeen)
H. Nuttycombe (Alberta)
A. D. L. Peterson (Alberta)
N. E. Schweda (Munich)
C. G. Strong (Alberta)
P. R. Walker (Alberta)
S. D. Weisbaum (Oxford)

6	DELIVERIES
102	X-RAY EXAMINATIONS
310	REHABILITATION TREATMENT
60	FIRST AID EMERGENCIES
533	PHARMACY SERVICES
34,560	CU. FT. OF WATER
244,270	LBS. OF STEAM
28	OPERATIONS
1,200 EMPLOYEES 450 STUDENTS 175 MEDICAL STAFF	TOTAL PERSONNEL 1,825

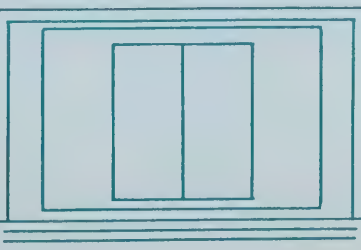
A TYPICAL DAY IN THE HOSPITAL

AVERAGE DAILY OCCUPANCY — 882 PATIENTS

PROVINCIAL LABORATORY TESTS	501
HOSPITAL LABORATORY TESTS	651
BLOOD TRANSFUSIONS	17
X-RAY FILMS	246
ANESTHETICS	22
MEALS SERVED COST OF FOOD	3,826 $1,017.00
ELECTRIC KW HOURS	13,128
CENTRAL SUPPLY SERVICES	3,400
LBS. OF LAUNDRY PROCESSED	12,795

UNIVERSITY OF ALBERTA HOSPITAL

60
ADMISSIONS



60
DISCHARGES

235
OUT-PATIENT
TREATMENTS

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

It is my privilege and pleasure to present the annual report of the Department of Medicine for the year 1958. As in previous years, it has been a year of expansion and growth in many areas.

In the field of medical education the Department this year has undertaken the complete hospital teaching program for the third year medical students. This responsibility has presented a heavy instructional program for the members of the teaching staff. It is felt that the results of this new venture have been well worth the effort. In collaboration with the Department of Clinical Laboratories all third year students now receive supervised instruction in laboratory methods in relation to their patients. The out-patient service continues to provide an increasing source of valuable teaching cases both at the undergraduate and graduate teaching level. No major changes have been made in the fourth year teaching program. The completion of the new clinical services wing, which is not too far distant, will result in the provision of excellent new teaching facilities in the Out-patient Department. This will require important new appointments to ensure adequate care of patients and the direction of the undergraduate and graduate teaching program.

Considerable improvement has been made in the graduate teaching program for members of the Resident Staff. Under the direction of Dr. R. E. Rossall and Dr. L. E. McLeod a formal program of lectures and seminars is being developed designed to prepare graduate trainees for the Royal College of Physicians and Surgeons examinations.

The Department has maintained its contribution to the continuing education program for physicians practicing in the Province of Alberta. A two day course in "Recent Advances in Therapeutics" was well attended. Members of the Department contributed to similar courses presented by other departments and took part in the clinical programs of district medical societies throughout the Province. These activities are recorded in the attached statement covering addresses, publications and research activities.

The provision of new quarters has been of great assistance to the expansion of the clinical and research activities of the Cardiovascular Unit. There has been an increased demand for the investigation of cardiac problems, as shown in the report on Special Services prepared by Dr. R. E. Bell. The addition of Dr. J. Woods as research fellow has resulted in increased research activity in this division of the department.

In the area of Endocrinology and Metabolism the major activities of the year have been devoted to the development of newer methods in steroid chemistry, which will permit a much wider and more adequate investigation of endocrine problems and will provide the techniques required for clinical investigation in the Metabolic Unit. This program has been made possible by support from Special Services, the National Research Council and the Markle Foundation funds. In collaboration with the Departments of Biochemistry and Clinical Laboratories methods for the assay of estrogens have been developed and will be available for clinical investigation and research in the near future. The expansion of this area of complicated steroid chemistry points out very clearly the requirement for a competent steroid chemist to direct further development and research in this area. Through funds provided by Special Services it is hoped that this requirement will be met in the coming year.

A start has been made on the muscular dystrophy program, made possible by a substantial grant from the Muscular Dystrophy Association of Canada. The initial phase of this program has been devoted to surveying the magnitude of the

muscular dystrophy problem in the Province. Cases are being studied in detail under the direction of Dr. George Monckton. Parallel genetic studies on the families of afflicted patients are being carried out by Dr. Margaret Thompson. In collaboration with the Department of Biochemistry, it is hoped in the coming year to study the chemistry of dystrophic muscle in both man and animals. A shortage of trained research workers in this field is seriously hampering progress in this portion of the program.

Dr. James Woods and Dr. William Walters have completed a year of clinical investigation. These Fellows were supported by funds made available through the Special Services Grant.

I am attaching a report which outlines the activities of the Department in research, publications and addresses.

In conclusion, I would like to say that the continued co-operation and encouragement from the hospital administration has been a major factor in the expansion and improvement of all activities in this department. It has been sincerely appreciated.

Respectfully submitted,

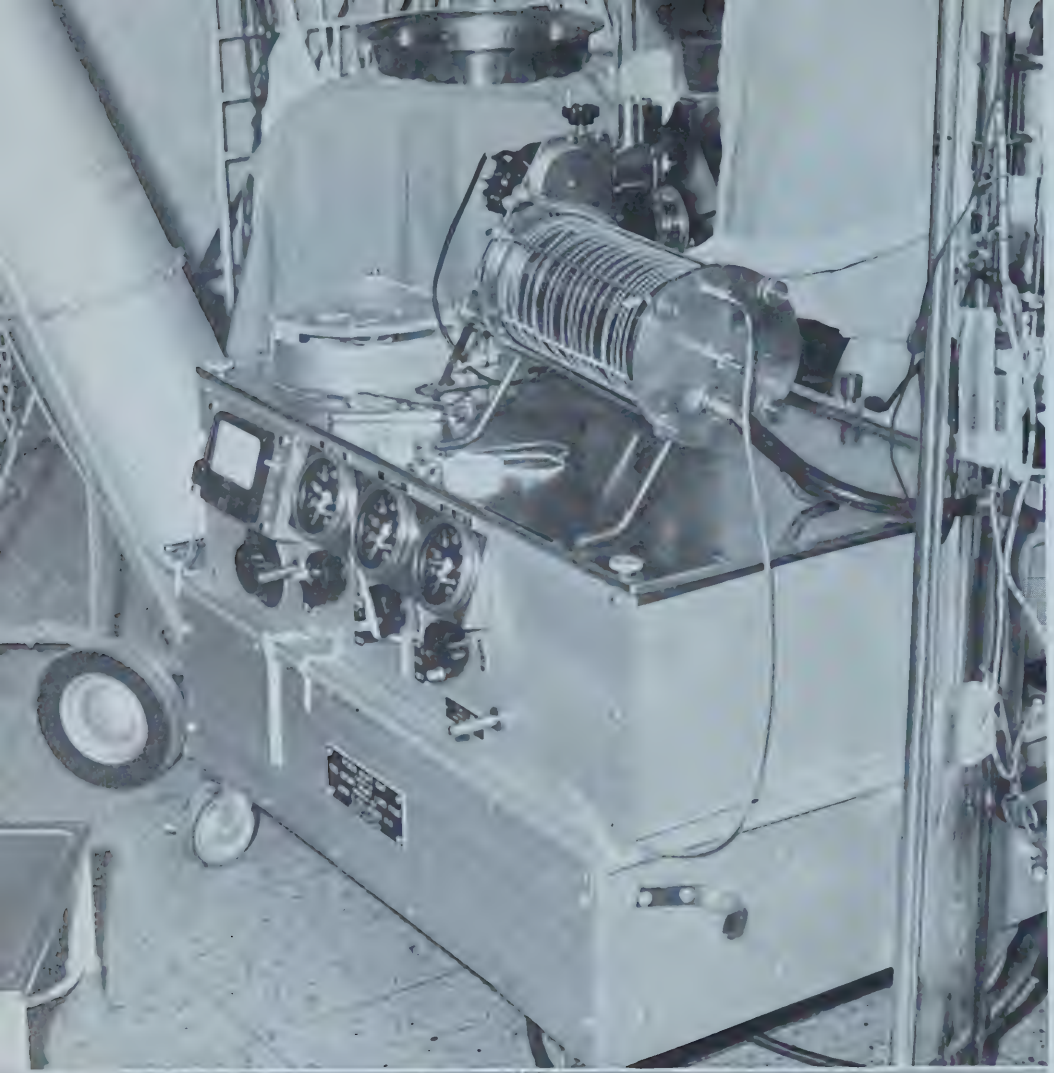
D. R. WILSON, M.D.,
Director

PUBLISHED PAPERS

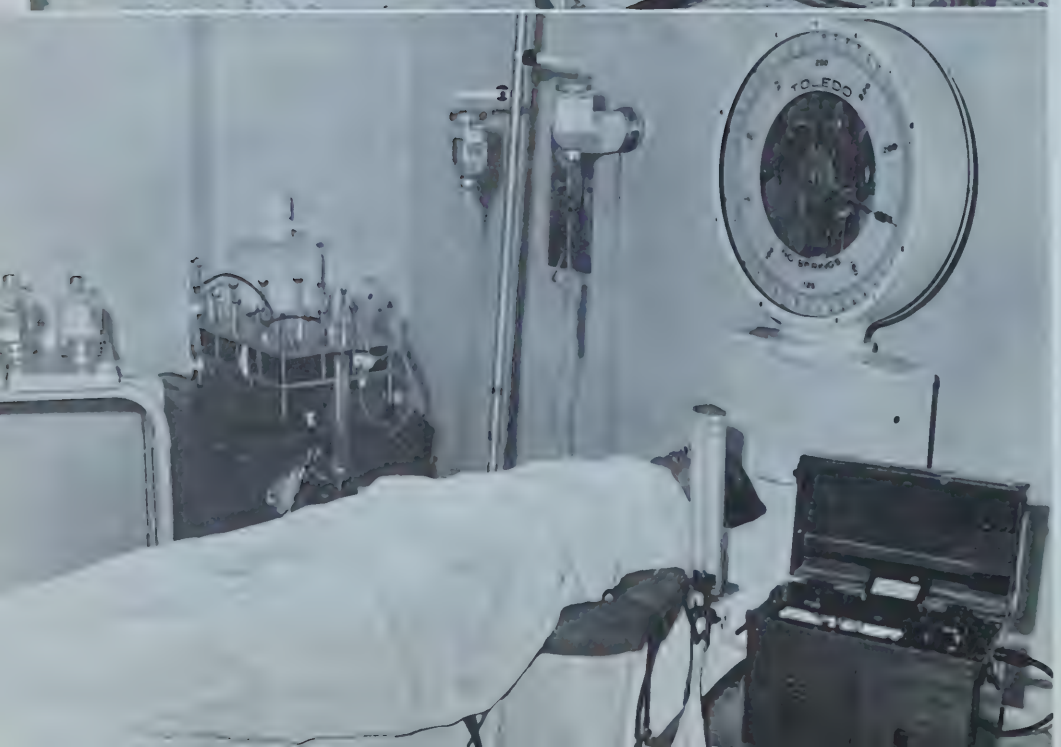
1. REED, H., LINDSAY, A., SILVERSIDES, J. L., SPEAKMAN, T., MONCKTON, G. and REES, D. L. *The Uveo-Encephalitis Syndrome or Vogt-Koyanagi-Harada Disease.* Can. Med. Assn. J., 79:451-459. September 15, 1958.
2. BRADSHAW, A. K., FRASER, R. S. and McINTYRE, J. W. R. *The Effect of Chlorpromazine on Pulmonary and Systemic Arterial Pressure in Dogs.* Can. Anaes. J., 5:337-340. July, 1958.
3. WILDE, Henry. *Functional Electrocardiographic Abnormalities.* New Eng. J. Med., 258:735-738. April 10, 1958.
4. ROSSALL, R. E. and THOMPSON, H. *Formation of New Vascular Channels in the Lungs of a Patient with Secondary Pulmonary Hypertension.* J. Path. and Bact., 76: 593-598, 1958.
5. ROSSALL, R. E., SHIEL, F. O'M. and SHOESMITH, J. *Coarctation of the Aorta with Patent Ductus Arteriosus and Multiple Intracardiac Defects.* Am. J. Card., 2:502-506. 1958.
6. EDWARDS, A. M. and HANSEN, S. *Endomyocardial Fibrosis in a North American Indian.* Can. Med. Assn. J., 80. April, 1959.
7. GREENHILL, S. *Changing Patterns of Work Satisfaction.* Can. Med. Assn. J. February 15, 1958.
8. GREENHILL, S. From Other Pages. J. Am. Med. Assn. February 14, 1959.
9. GREENHILL, S. *Men, Machines and Emotions.* Can. Med. Assn. J. September 15, 1958
10. GREENHILL, S. *Health and Human Relations in Industry.* Twelve lectures with case studies. Printed material compiled in brochure form by Department of Extension, University of Alberta.
11. GILBERT, J. A. L. *Oral Insulin Substitutes.* Man. Med. Rev., 38:231. April, 1958.
12. GILBERT, J. A. L. *Pre-diabetic Syndromes.* Man. Med. Rev., 38-365. June-July, 1958.
13. RODMAN, F. B., DVORKIN, J., WILLOX, L. and MADAY, W. University of Alberta Hospital Formulary, January, 1959.

SCIENTIFIC ADDRESSES

1. *Pulmonary Function in Health and Disease.* District Medical Societies at Red Deer, Lethbridge, Medicine Hat, Grande Prairie and Peace River, September and October, 1958. WILSON, D. R.
2. *Radioactive Iodine Therapy of Recurrent Thyrotoxicosis.* Alberta Society of Specialists, Lethbridge, September, 1958. WILSON, D. R.
3. *Insulin Therapy.* British Columbia Diabetic Association, Vancouver, January, 1959. WILSON, D.R.
4. *Adrenocortical Function in Thyroid Disease.* National Research Council, Banff, January, 1959. WILSON, D. R. and McLEOD, L. E.
5. a. *The Symptomatology of Endocrine Disease.*
   b. *Physical Manifestations of Endocrine Disorders.*
   c. *Obesity.*
   d. *Symposium on Hypertension.*
   Department of Medicine Refresher Course, University of British Columbia, Vancouver, February, 1959, WILSON, D. R.
6. *Clinic—Non-Neoplastic Lesions of the Upper Gastrointestinal Tract.* University of Alberta Refresher Course, April, 1958. GILBERT, J. A. L.
7. *Assessment of the Patient for Surgery.* Edmonton Society of Anesthetists, May, 1958. GILBERT, J. A. L.



Heart Lung Pump—
Open Heart Surgery



Artificial Kidney

DEPARTMENT OF SURGERY

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital.

Sir:

It is once again my privilege to present to you at this time a report of the Department of Surgery in the University of Alberta Hospital for the year ending December 31st, 1958.

It has continued to be evident that the University of Alberta Hospital plays a unique role in its position as the major medical center of the Province of Alberta, and not only have the number of surgical patients increased year by year, but the complexity of the problems being presented for diagnosis and for operative management has also been a feature of our admissions during the last year. This has been applicable to the Department of Surgery as well as to the other departments in the hospital orbit. The Department of Medicine has played a role of increasing importance each year in improving the diagnostic facilities in the hospital, and we are particularly grateful to the Department of Anaesthesia and to the other clinical departments who continue to carry their responsibilities in the team effort that goes with total surgical care in an institution such as this.

In the Division of Urology during the last year, J. O. Metcalfe, F.R.C.S.(C) has succeeded Doctor Gordon Ellis as Director, and there has been a 50% increase in the number of patients going through this division. This, of course, has taxed to the utmost the facilities of our present physical plan. We have inaugurated the training of Colombo Plan Fellows in the Department of Surgery this year and we have Doctor Chari from the University of Hyderabad, India, as the first member of the resident staff supported by the Colombo Plan who has been accepted for training in our institution. At the moment he is secunded to the Division of Urology. The research project in the McEachern Laboratory with the artificial kidney continues to keep it in readiness for the calls that are made upon it in the clinical departments in the University of Alberta Hospital, and again the Division of Urology would like to pay tribute to Doctor Kowalewski of the McEachern Laboratory staff and Doctor Bell of the Department of Clinical Laboratories for the advice and encouragement so readily available to the Renal Function Unit. Clinical investigative studies will be increased in this Division when the physical facilities of the new wing will give them more available space.

In the Division of Orthopaedic Surgery Olav Rostrup, F.R.C.S.(C) has replaced Doctor R. G. Huckell as Director, and again this large service has continued to operate to full-bed capacity with a prolonged waiting list throughout the last year. In November the Orthopaedic staff put on a two day postgraduate course for general practitioners in Trauma and Orthopaedic Surgery which was very successful. This year inaugurates the start of a program of fundamental research in the Division of Orthopaedics that includes both laboratory and clinical studies, which as time goes on I am sure will be a credit to this institution. At the moment a clinical study on myositis ossificans in burns and hemiplegia, a study of physical fitness with its relationship to athletic injuries in conjunction with the Departments of Medicine and Physical Education at the University of Alberta are under way, as well as a number of fundamental studies which are cooperative between the McEachern Laboratory and the University Hospital on prostheses for ligament replacement and dermis grafts for arthroplasties of the hip.

In the Cardiovascular Unit Doctor Callaghan and Doctor Couves have continued to carry out a very active program, not only in patient service, but also in education and research. As of December 31st, 1958 the members of this Unit have performed one hundred and five open heart operations using total cardiopulmonary bypass with satisfactory results. The Unit is now functioning twice a week and has had to limit the number of operative procedures that we can carry out because of the demands for blood which were taxing the blood bank to the point that the situation would become serious if we increased the number of cases beyond this limit. Vascular replacements being used in the Unit now consist of Dacron and Teflon, and the commercially available prostheses appear to be far superior to the original homografts that Doctor Callaghan introduced in this hospital in 1955. There has been a Fellow in Cardiac Surgery in the Department in the last year, Doctor H. T. G. Williams from the University of Liverpool; and Doctor Douglas Cardozo has served as a Fellow in Cardiovascular Surgical Research during the same period. Doctor Williams has been studying certain aspects of peripheral vascular disease from a research standpoint, and Doctor Cardozo has been studying infant mortality from a cardiovascular surgical standpoint. With the aid of a Federal Health Grant and the cooperation of the Provincial Government, Doctor Callaghan and his colleagues have set up an Infant Resuscitation Room in the third floor nursery which is now ready to accept children for total cardiopulmonary bypass in an attempt to resuscitate both severe respiratory distress and cardiovascular disease. Doctor Couves has been continuing to utilize the bubble oxygenator to perfuse both the extremities and the pelvis with chemotherapeutic agents for palliation of far advanced carcinoma. Station 56, which has been set up as a cardiovascular and thoracic ward, has functioned very satisfactorily, as has the cardiac recovery room. An active graduate teaching program is being carried out in the Cardiovascular-Thoracic Service, and active participation by the resident and interne staff has been developed.

It is a great privilege for me to pay tribute to Doctor Callaghan and Doctor Couves for their over-all efforts in the development of this Unit to its position I think as one of the foremost units in this country in this rapidly advancing field.

During the last year the Surgical Department has participated in an adjuvant chemotherapy study, which has been set up by the National Institutes of Health, in which we have used various chemotherapeutic agents on a double-blind basis as an adjuvant treatment to surgery in the management of cancer of the stomach, lung and colon. This study has been supported by the National Cancer Institute who have given us a Research Associate to develop the statistical and follow-up aspects of the study, and we were particularly pleased that when the international meeting was held recently in Chicago that the case records from our institution and the follow-up records were used as an example of the type of records that should be available in any institution. This in itself is a great tribute to Doctor Couves who has been in charge of the study, as well as to Miss Hartley who originated the plan as a Research Associate and who has turned it over to Miss Lindstrom, who is here on a year's basis from Sweden.

The General Surgical Service has continued to enlarge and develop, and has played its part in handling the more complex problems that arrive here from all parts of the Province for management in this institution.

Dr. Alton has recently been appointed to continue with Doctor Hitchin the plastic and reconstructive aspects of the surgical field, and he as well as taking part in patient care has inaugurated a teaching and research program both in the fundamental field at the McEachern Laboratory and more recently in the clinical division.

During the last year approval was granted by the Special Services Committee of the hospital for the establishment of a Cleft Palate Rehabilitation Clinic. The members of the Clinic consist of numerous medical and dental specialists interested in cleft palate problems. This group will meet regularly in 1959 to examine and make recommendations for treatment of these children. It is of interest to note that this Clinic is now functioning and is going to be a real addition to the patient service in our institution.

In the Division of Neurosurgery continued effort has been made to keep abreast of technical developments in the management of the more desperate neurosurgical problems. Of particular interest are the new brain-heart shunts for hydrocephalus and the use of hypothermia and artificial hibernation for severe brain injuries and intracranial haemorrhage. Also of interest is the application of pneumostereotaxic methods for the placement of destructive lesions in the basal ganglia for the relief of Parkinsonism and other previously uncontrollable motor disorders.

Irreversible shock has been one of the long-standing problems in surgery and this project has been attacked both on the fundamental and clinical sides by Doctor Couves, and he is being supported at the moment by the Alberta Heart Foundation with a grant in aid. One technician is employed in the Shock Room in the University Hospital and with the cooperation of Doctor Fraser of the medical service he is developing dye dilution techniques which will be used in the determination of cardiac output in irreversible shock. One patient in profound irreversible shock who had a staphylococcal septicemia was treated by assisted circulation and an attempt at blood sterilization by ultraviolet light. This is just a beginning in the attack on this important problem and Doctor Couves and his co-workers hope to embellish methods for studying all the facets of this problem. They are now ready to study any patient in our hospital who has by definition, irreversible shock from any cause.

Doctor A. B. McCarten has returned to us during the last year from the M. D. Anderson Hospital in Houston, Texas, where he studied for a period of two years the particular field of head and neck surgery. It is evident to us already that the contribution that Doctor McCarten will make in the management of many of the more complicated problems in this field will increase greatly the service facilities that we can offer to the people of the Province of Alberta in this important field.

Doctor R. C. Harrison and his group who have carried out an outstanding program of fundamental research in the field of gastrointestinal physiology have transferred some of their interest to the clinical field this year, and have established facilities for the study of patients in the University Hospital.

Tumour Rounds have been carried out jointly during the last year under the chairmanship of Doctor Harrison from the clinical side in the hospital, and Doctor Donald Dick from the radiotherapeutic standpoint in the Cancer Clinic. I think it is only fitting that we at this time should pay a tribute to three radiotherapists who contribute a great deal to our discussions in this field—Doctor Dick, Doctor Phillips and Doctor Duggan—and it is evident that these rounds are established on a firm basis and will become a more important part of our teaching program as the years go by.

The problem of resistant infections will continue to be an important one for surgeons all over the world in the next few decades and our hospital committee, which is co-chaired by Doctor T. S. Wilson of the Department of Surgery and Doctor R. D. Stuart of the Department of Bacteriology, has been very active in giving us the type of leadership we need in this field. These two co-workers make rounds of every surgical ward in our institution each Tuesday afternoon and not only hear about the infected wounds but see them, so that for the first time we are not talking about our impressions of what the infection problem is in our own institution, but we have an accurate knowledge of it. It is heartening to hear these men say that our problem has improved tremendously in the last two years and we are now, with the continued cooperation of the Administration and the Housekeeping Service, able to report that the situation is well under control; and as long as the members of our staff maintain an awareness of the need for constant vigilance in all matters of surgical technique, I am sure the situation will continue to be a very satisfactory one.

We are all indebted to the Special Services Committee of the University Hospital for their cooperation and support in so many of the projects in which we have been interested.

I will attach a list including the titles of papers published by members of the Department, and a list of research projects being sponsored by the Department.

The use of Taflon as a prosthetic ligament in dogs. J. Gort and O. Rostrup. Supported by University of Alberta Medical Research Grant No. 158.

Further development of ventricle type blood pump. E. C. Elliot and J. C. Callaghan. Supported by University of Alberta Medical Research Grant No. 160.

Further studies on gastric antrum as an endocrine organ. R. C. Harrison and S. Husain. Supported by N.R.C. No. 557.

The effect of the various types of gastrectomy on an experimentally produced peptic ulcer in dogs. O. Retzer and R. C. Harrison. Supported by N.R.C. No. 557.

Intestinal pouch and its mucous secretion studied by S^{35} uptake. B. Michalyshyn, G. L. Willox and K. Kowalewski. Supported by N.R.C.M.A. No. 718.

The cardiac effects of experimental haemorrhagic shock in dogs. C. Couves and W. Pawluk. Supported by University of Alberta Medical Research Grant No. 143.

Effect of various steroid hormones on respiration and glycolysis of normal and malignant tissue. R. A. Macbeth. Supported by N.C.I. Grant No. 226.

Experimental study of factors concerned with spontaneous mediastinal air in the newborn. C. M. Couves, J. R. McIntyre and W. C. Taylor. Supported by University of Alberta Medical Research Grant No. 152.

Transplantation of human tumors into hamsters. B. Margolus and C. M. Couves. Supported by University of Alberta Medical Research Grant No. 151.

Further studies in controlled cardiac output in dogs. E. C. Elliot. Supported by University of Alberta Medical Research Grant No. 159.

Disposable disc oxygenator. E. C. Elliot. Supported by University of Alberta Medical Research Grant No. 159.

Further studies on tricuspid plastic pump. E. C. Elliot. Supported by University of Alberta Medical Research Grant No. 159.

Myocardial re-vascularization and heart valve replacement. E. C. Elliot. Supported by University of Alberta Medical Research Grant No. 160.

Intestinal anastomosis (Experimental study in dogs). H. T. G. Williams and W. Pisesky. Supported by University of Alberta Medical Research Grant No. 146.

Study on postoperative bowel motility in dogs. H. T. G. Williams and W. Pisesky. Supported by University of Alberta Medical Research Grant No. 148.

Further studies on experimental portal hypertension. S. Kling, T. C. Eid and K. Kowalewski. Supported by N.R.C.M.A. Grant No. 713.

Artificial kidney in experimental renal injury in dogs. J. O. Metcalfe and T. C. Eid. Supported by N.R.C.M.A. Grant No. 717.

Experimental gallbladder carcinoma in hamsters (Further study). K. Kowalewski, G. O. Bain, J. Gort, O. Retzer, S. Husian and W. Pawluk. Supported by N.C.I. Grant No. 208.

Experimental diabetic acidosis in rats and its effect on adrenal steroids. K. Kowalewski, and E. C. Elliot. Supported by University of Alberta Medical Research Grant No. 155.

Further studies on experimental atherosclerosis in cockerels. K. Kowalewski. Supported by Nilevar Trust.

Oxygen consumption of muscle in cortisone treated rats. K. Kowalewski. Supported by University of Alberta Medical Research Grant No. 161.

Further study on collagen formation in healing tissue with S^{35} uptake method. K. Kowalewski. Supported by Nilevar Trust.

Further studies on blood oxygenator for cardiac surgery. J. C. Callaghan and D. Cardozo. Supported by Infant Heart Operations Trust.

Instrument for repairing pulmonary stenosis obviating necessity of cardiopulmonary bypass or occlusion of pulmonary flow. D. Cardozo and J. C. Callaghan. Supported by Infant Heart Operations Trust.

Intracardiac aorta coronary anastomosis and its possible application to some cases of transposition of great vessels. D. Cardozo and J. C. Callaghan. Supported by Infant Heart Operations Trust.

Further Studies on wound healing. J. M. Alton, W. Pisesky and G. E. Bondar. Supported by Nilevar Trust.

Catheter introducer. E. C. Elliot.

Effect of sweet pea toxin on atherosclerosis in cholesterol fed birds. K. Kowalewski. Supported by University of Alberta Medical Research Grant No. 168.

Effect of gastric fistula on bone metabolism in rats. K. Kowalewski and W. A. Strutz. Supported by Nilevar Trust.

Study of infections in the University of Alberta Hospital. T. S. Wilson in conjunction with R. D. Stuart.

A study of the development of artificial valve prostheses for the interior of the heart. J. C. Callaghan and D. Cardozo. Supported by the Alberta Heart Foundation.

A study of the causes of neonatal mortality with special reference to the possibility of resuscitation by means of extra corporeal circulation in very small infants with respiratory and circulatory distress in the newborn period. J. C. Callaghan and D. Cardozo. Supported by National Health and Welfare.

The development of a membrane oxygenator. J. C. Callaghan and D. Cardozo.

A study of assisted circulation with special interest in the feasibility of supportive therapy during acute myocardial ischemia due to coronary occlusion. J. C. Callaghan and D. Cardozo.

Investigation of mortality and morbidity of gastric resection for the Adjuvant Chemotherapy Study of the American Cancer Society. A. B. McCarten.

Investigation of the spread of carcinoma in the nerves of head and neck. A. B. McCarten.

Cerebral blood flow under conditions of hypercapnia and under high carbon dioxide tension. C. A. Ross in conjunction with Charles Heath of the Department of Physiology.

Clinical review of fractures of the head of the radius. This is a comparison of end results of excision and prosthetic head replacement. O. Rostrup and Glen Edwards.

Fractures of the shaft of the humerus—a 15 year survey. O. Rostrup, G. L. Wilson and P. B. R. Allen.

Arthroplasty of the hip - review since 1951. O. Rostrup, H. Shimizu and G. Edwards.

Experimental use of Ostamer in fractures in dogs. O. Rostrup and Hugh McNeil. Supported by University of Alberta Research Fund Grant No. 166.

A study into the prevention of experimental thrombophlebitis utilizing a muscle stimulator. C. M. Couves and W. C. MacKenzie. Supported by University of Alberta Medical Research Fund Grant No. 153.

Studies in the production of aortic aneurysms in rats fed on sweet pea meal. C. M. Couves. Supported by University of Alberta Medical Research Fund Grant No. 144.

The cardiac effects of irreversible shock. C. M. Couves. Supported by the Alberta Heart Foundation.

Investigation of cerebral circulation and pressure with a partial or complete bypass. The purpose being to investigate the changes in cerebral pressure under hypo- and hyper- ventilation of the lungs. C. S. Dafoe, C. A. Ross and C. Heath.

MONEY RECEIVED FROM THE SPECIAL SERVICES FUND OF THE UNIVERSITY HOSPITAL

Peripheral Vascular $2,500

Artificial Kidney $1,935

OPERATING ROOM

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

The following is the report of the Operating Room of the University Hospital of Alberta year ending December, 1958.

Total Major Operations for 1957-1958	3,294
Total Major Operations for 1958-1958	3,288
Decrease	
Total Minor Operations for 1957-1958	3,326
Total Minor Operations for 1958-1958	3,738
Increase	

Classification of Operations:

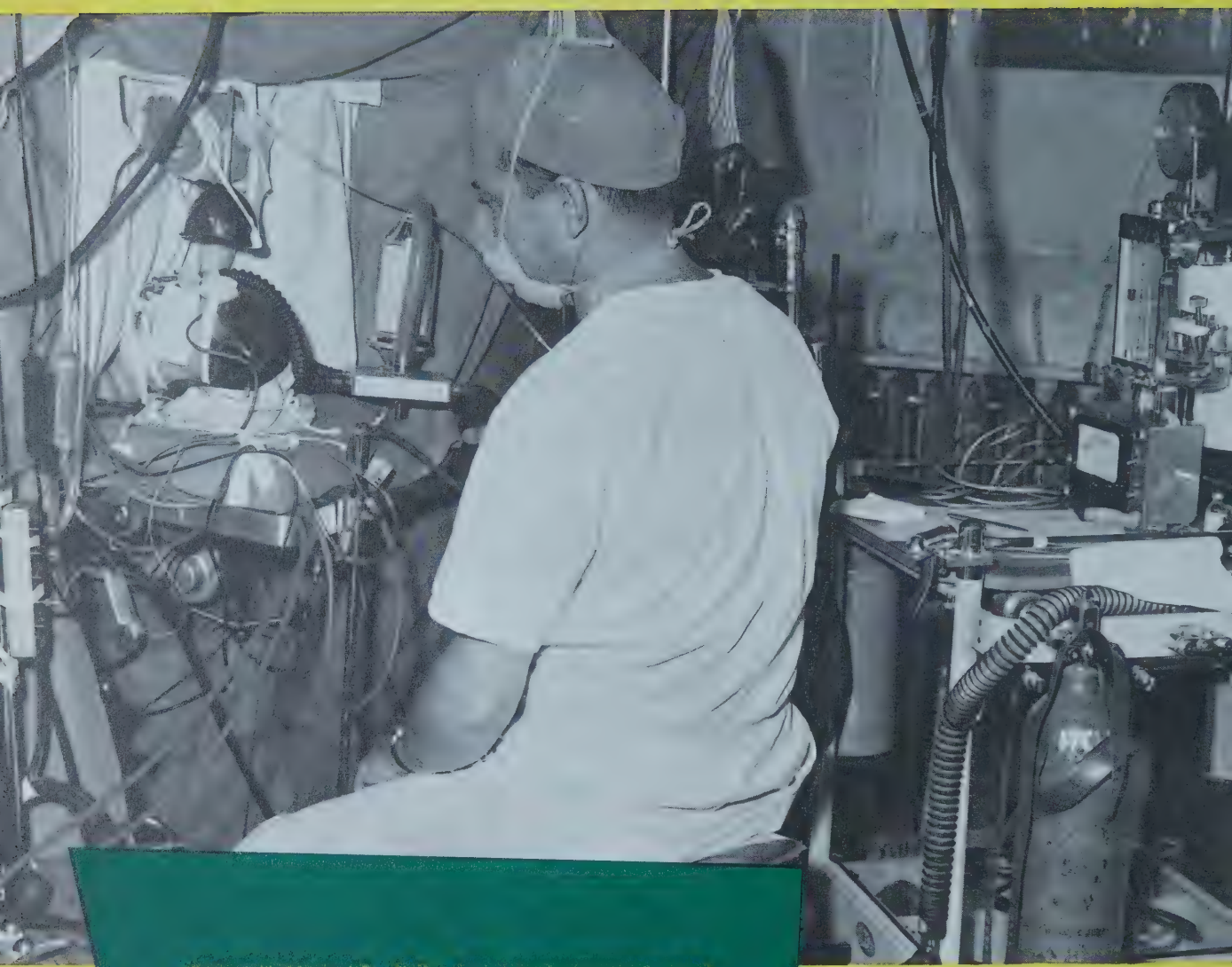
General Surgery:		
Major	1,447	
Minor	818	2,265
Gynaecological Surgery:		
Major	438	
Minor	757	1,195
Genito-urinary Surgery:		
Major	134	
Minor	71	205
Orthopaedic Surgery:		
Major	500	
Minor	651	1,151
Thoracic Surgery:		
Major	141	
Minor	15	
Endoscopies	95	251
Plastic Surgery:		
Major	176	
Minor	108	284
Ophthalmology:		
Major	257	
Minor	200	457
Ear, Nose and Throat:		
Major	7	
Minor	275	
T. & A.	404	
Endoscopies	15	701
Dental Surgery:		
Extractions	216	216
Miscellaneous:		
Minor	1	1
Neuro-Surgery:		
Major	188	
Minor	112	300

Anaesthetics in Operating Room

Cyclopropaine	1,414
Trilene	42
Vinethene	1
Ether	1,109
Caudal Block	7
Nitrous Oxide	2
Brachial Block	28
Local Block	4
Local	741
Spinal	264
Pentothal	3,413
	7,025
None	1
	7,026

Respectfully submitted,

R. Coombs, R.N.,
Supervisor,
Operating Room



DEPARTMENT OF ANAESTHESIOLOGY

Dr. A. C. McGugan,

Medical Superintendent,

University of Alberta Hospital.

Sir:

The following is the Annual Report of the Department of Anaesthesia for the calendar year 1958. This report includes January, February and March 1958 which months were included in the 1957 report, therefore some facts will be repeated.

During the year another considerable increase in work was noted, both in numbers of cases and total hours of anaesthesia. The increase in prolonged major cases was considerable this was accounted for mainly by cardiovascular and cancer surgery. During the year 8,210 anaesthetics wree administered in the operating room, an increase of 1,230 over 1957. There were 7,321 elective cases and 889 emergent cases.

The Recovery Room cared for 6,800 cases an increase of 1,439 cases over 1957. With several staff changes in the past year this has been a dificult problem, one which will require more staff and space, soon to be available in the new Service Wing. The increase in number of Recovery Room cases was due in large part to the fact that the Recovery Room is now open until 11 p.m. which has been a great advance in patient care. We some day hope to see 24 hour service.

There was little change in anaesthetic agents and technics used. The use of spinal anaesthesia continues to decline which is regrettable as it makes teaching of this excellent method of anaesthesia difficult with so few cases available; only 762 cases received spinals as compared to 915 in 1957.

During the year the department's residency quota of four has been filled. It will be necessary in the near future to increase the quota as the department grows. In January 1958 Dr. Hemstock joined the staff, and the services of two more anaesthetists will be necessary to handle the increase requirements of the new Service Wing. This staff is now being sought:

During the year 1958 the following titles were presented or published by members of the department:

1. Psychological and Biochemical Changes with the Bubble Oxygenator during Open Heart Surgery.
2. Changes in Pulmonary and Systematic Circulations in the Dog with Chlorpromazine.
3. Undergraduate Teaching of Anaesthesia.
4. Muscle Relaxants and Spinal Anaesthesia in General Practice.
5. Anaesthesia for Open Heart Surgery.
6. Obstetrical Anaesthesia and Analgesia.

I again wish to express our thanks for the help and cooperation received from the administrative staff.

Respectfully submitted,

E. A. Gain, M.D.,
Director,
Department of Anaesthesia

OBSTETRICS AND GYNAECOLOGY

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

During the calendar year 1958, busy as ever, there has been created on many occasions a very interesting atmosphere in our department by virtue of variety and scope of our clinical problems.

Our obstetrical admissions have increased and this has been due in some measure to an increase in our patients admitted from the Outdoor Clinic, of which fact we are pleased as it gives us clinical material for our resident staff.

During the past year, there have been no maternal deaths. Intrapartum trauma has been minimal and our perinatal death rate has decreased. The attendance at Prenatal Classes has increased; more than 175 women have been in attendance at four or more classes. Great interest and enthusiasm has been maintained and our end results have been exceedingly gratifying. Sedation during labor has been maintained at a satisfactory dosage level and the desire to be awake at delivery has prompted the increasing use of Pudendal block, most of which has been administered by the trans-vaginal route. This has contributed, as well, to our clinical interest and satisfaction.

Our experience with the Rh negative mothers warrants a note in this report. During the year, there were 304 Rh negative mothers admitted for delivery. Of these, 46 showed antibodies of varying titre. Four babies were stillborn, and 3 died neonatally. Exchange transfusion was undertaken one or more times in 25 of the liveborn affected babies. As well, 7 liveborn babies were considered to have ABO incompatibility and of these, 5 received exchange transfusions. The Red Cross Blood Transfusion Unit and the Paediatric Department rendered invaluable aid in the diagnosis and treatment of these formidable problems and deserve our thanks.

Our puerperal complications have been relatively few. Our program of early ambulation and post natal exercises (given in the Physiotherapy Department) may have contributed to this happy outcome. Neonatal infections have continued to engage our watchful attention, but no serious consequences have developed. Dr. R. H. Horner and his Infection Committee have maintained their daily vigilance and Dr. R. D. Stuart has rendered invaluable assistance by his interpretation of cultures and his interest and practical advice necessitated therefrom.

Our Perinatal Rounds each month have produced much creative discussion and instruction for resident staff, and has been of uniform interest to us all. Our thanks are due to Dr. J. Stirratt of the Pathology Department and the other invited colleagues who have contributed to the success of these rounds.

Dr. Ferguson, our Teaching Fellow, has contributed greatly to resident teaching with his weekly program and this, it is planned, will continue in effect.

A comparison, showing the increase in each subsequent year of obstetrical admissions and deliveries, might be of interest and it is noted herewith:

Year	Admissions	DELIVERIES		
		Per Vaginum	Caesarians	Total
1952-53	1605	1456	61	1517
1953-54	1771	1595	72	1667
1954-55	1666	1520	79	1599
1955-56	1685	1489	83	1572
1956-57	1880	1645	88	1733
1957-58	2061	1853	99	1952
Year 1958	2108	1882	87	1969

Here follows a statistical summary of our 1958 obstetrical figures:

Admissions				2,108
Discharged undelivered				139
Vaginal deliveries				1,882
Abdominal deliveries: Initial—42 (Caesarians) Repeat—45				87
				1,969
Babies Delivered—				
Liveborn	Male	1,010	including Twins	Male 7 pair
	Female	984		Female 10 pair
				Mixed 8 pair
Deadborn	Male	23		
	Female	12		
Perinatal Deaths—				
Stillbirths		35	Mature 8	
			Premature 12	(2.2 lbs. - 5.5 lbs.)
			Non viable 15	(under 2.2 lbs.)
Neonatal (7 days)		25	Mature 10	
			Premature 10	
			Non viable 5	

Our gynaecological service has remained busy as ever, and indeed, there were over one hundred more admissions during this present year. Our routine has been much the same but our surgical treatments have increased. Our patients have responded well to therapy and our complications have been relatively few. Several changes in nursing staff have occurred during the year and to those retired, we owe our thanks; and to their successors, we owe thanks as well, for their interest and cooperation.

Our gynaecological cancer admissions have increased, due in some measure to patients referred from the southern half of the Province. The clinical radium therapy has been in charge of Dr. L. B. Brown, who works in close association with the therapists of the Cancer Clinic, and our results have made an initial improvement, certainly the local reaction and the tissue reaction from cobalt therapy has caused less complications than we used to have many years ago.

During the year, Dr. Brown, as well, has reported on approximately 500 vaginal and cervical smears subjected to cytological examination. There were 38 cancers diagnosed by smear and confirmed by a biopsy. Two cases of carcinoma in situ owe their detection to smear examination. No false negative were reported. In addition, in conjunction with the Cancer Diagnostic Clinic, smears were used to estimate estrogen activity in early post menopausal women with cancer of the breast as a measure for the determination of the need for oophorectomy. This work, it is hoped, will continue.

A comparison of gynaecological admissions and operations reveals the increase in our activities over the past 7 years.

		OPERATIONS		
Year	Admissions	Major	Minor	Total
1952-53	1117	400	460	853
1953-54	1237	380	638	1018
1954-55	1318	360	733	1093
1955-56	1409	420	809	1229
1956-57	1331	464	769	1233
1957-58	1439	457	799	1256
Year 1958	1548	500	919	1419

As the table shows, our 1958 admissions reveal a 40% increase during the past 6 years; major surgical procedures are increased by 25% and minors are almost doubled. Small wonder that we wage an uphill battle for Operating Room space.

The following deaths occurred on our gynaecological services during the year:

A. Post-operative—1. No. 171373. Age—54. Death at 15 days following vaginal repair. Nephrosis. Anuria.
B. Infection—1. No. 20134. Age—37. Post-abortal. Septocaemia. Salpingitis with peritonitis.
C. Cancer: Cervix uteri—4.
No. 155259. Age—48. Direct extension to uterus, ovaries and adrenals.
No. 93021. Age—50. Extension to pelvis with vaginal hemorrhage.
No. 152765. Age—73. Extensive pelvic, adrenal and lumbar vertebrae metastases.
No. 172950. Age—46. Extension to pelvis and to lungs.
Endometrium—1. No. 163966. Age—56. Extensive spread, ovaries, adrenals, liver and spleen.

Ovary—5.

No. 165513. Age—57. Extensive spread. Uremia.
No. 48093. Age—85. Extension to peritoneum and omentum. Recent surgery.
No. 155143. Age—43. Extension to uterus and bladder.
No. 22669. Age—79. Extension to bowel and perforation of pelvic colon.
No. 74715. Age—49. In association with carcinoma of stomach, extensive spread. Bronchopneumonia.

During the past year, four papers were published by members of the department as follows:

1. VANT, J. R. *Studies on Perinatal Mortality in the Province of Alberta for Years 1955-56.* Am. J. Obst. and Gynec., May, 1958, Vol. 75, No. 5, page 995.
2. BUGIS, JOSEPH. *A Review of the Iso-Immunized Rh Negative Mothers Delivered in Three Edmonton Hospitals in 1956.* Alberta Medical Journal, May, 1958, page 81.
3. DAY, ALLAN. *Ovarian Malignancy Complicating Pregnancy.* Can. Med. Journal, June, 1958.
4. PARLEE, S. S. *Radiation Hazards in Obstetrics and Gynaecology.* Am. J. Obst. and Gynec., Vol 75, No. 2, February, 1958, page 327.

Our members have, as well, taken part in presenting papers to the various Refresher Courses and district meetings throughout the Province.

During the year, Dr. William Ferguson was added to our University Department as Teaching Fellow, and has enjoyed the privileges of the hospital.

The Superintendent's office, the Administration, the Nursing Office, have all added to our comfort by their gracious cooperation; and our thanks, as usual, are due to the nursing and resident staff.

All of which is respectfully submitted,

J. Ross Vant, M.D.,
Director,
Department of Obstetrics and Gynaecology

DEPARTMENT OF PSYCHIATRY

Dr. A. C. McGugan,
Superintendent,
University of Alberta Hospital.

Sir:

It is my privilege to submit to you a report of the activities of the Department of Psychiatry for the year ending December 31, 1958.

The expansion and development of the psychiatric facilities has proceeded steadily. The additional beds assigned to this Department have enabled us to provide more adequate in-patient service and to develop more adequate undergraduate and graduate clinical teaching. The addition of more resident house-staff has enabled us to provide a much more adequate diagnostic and therapeutic service. The diagnostic services in particular have been greatly improved by the addition of one full-time psychologist and one part-time. The addition to the staff of Miss

Imelda Chenard, P.S.W., has further enhanced the quality and scope of our services.

The total admissions for the year amounted to 655.

The expansion of our clinical facilities has enabled us to undertake clinical teaching in all of the second, third and fourth undergraduate years.

The number of doctors in our graduate training program has been increased to six and provision has been made for a further increase for next year. A full program of seminars covering psychotherapy, psychodynamics, psychopathology, and the basic sciences related to psychiatry has been instituted in addition to regular clinical conferences.

Appended is a list of the publications and papers presented by members of our Staff.

On behalf of all members of our Staff I would like to express deep appreciation for the helpful co-operation of the Nursing Staff and for the ready assistance, encouragement and guidance of the Administrative Staff.

Respectfully submitted,

K. A. YONGE, M.D.,
Director

PUBLICATIONS BY MEMBERS OF THE DEPARTMENT OF PSYCHIATRY, 1958

YONGE, K. A.—*Of Birds, Bats and Bees*"—A study of schizophrenic thought disorder: Canadian Psychiatric Association Journal, 3:1: January, 1958.

PAPERS PRESENTED BY MEMBERS OF THE DEPARTMENT OF PSYCHIATRY, 1958

YONGE, K. A.—"*Changing Concepts of Mental Health*"—Annual Meeting of the Canadian Mental Health Association, Calgary: February 28, 1958.

YONGE, K. A.—"*The Place of Psychological Counselling in the Ministry*"—St. Stephen's College, Edmonton: February 25, 1958.

YONGE, K. A.—"*The Roles of Minister and Physician in the Process of Healing*"—Institute for Clinical Pastoral Counselling, Moose Jaw, Saskatchewan: April 20, 1958.

YONGE, K. A.—"*Changing Concepts in Mental Health*"—Graduation Address to Nurses at the Provincial Mental Hospital, Ponoka: May 29, 1958.

YONGE, K. A.—"*Psychiatry and Religion*"—Edmonton Council of Churches, Edmonton: June 10, 1958.

YONGE, K. A.—"*Comparative Experiential Changes by Psychoanalytic and Religious Procedures*"—Read at the Fourth International Conference on Psychotherapy, Barcelona, Spain: September, 1958.

YONGE, K. A.—"*Mind and Matter*"—Seminar on Mental Health in Industry (C.M.H.A.): October 6, 1958.

S. SPANER—

1. "*Some Psychiatric Problems in the Senior Citizen*"—Jewish Golden Age Society: April, 1958.

S. SPANER—

2. "*The Psychogenic Factors in Low Back Pain*"—The Workmen's Compensation Board, August, 1958.

S. SPANER—

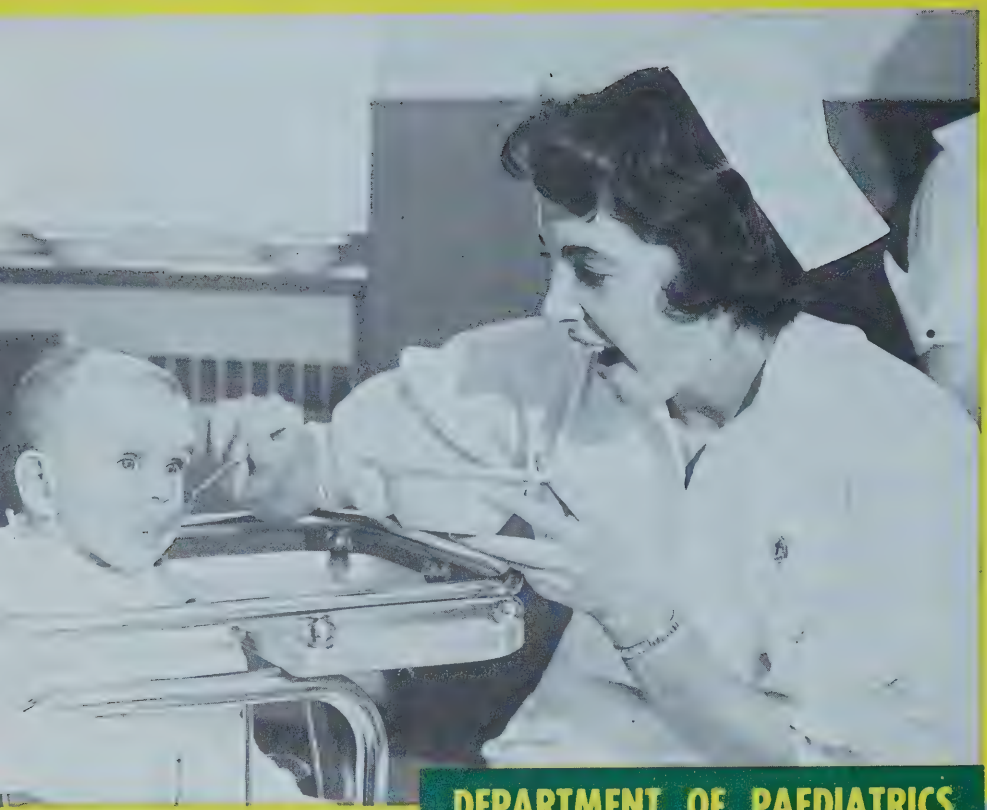
3. "*Changing Concepts in Psychiatry from a General Hospital Viewpoint*"—The Provincial Mental Institute, September, 1958.

S. SPANER—

4. "*The Inestimable Value of Social Workers in the Field of Psychiatry*"—The Canadian Association of Social Workers Annual Meeting, Guest Speaker, September, 1958.

S. SPANER—

5. "*Compensationitis — a Post-Traumatic Neurosis*" — The Second Annual Seminar on Mental Health in Industry, Edmonton, Alberta, October 7, 1958.



mealtime

DEPARTMENT OF PAEDIATRICS

playtime

DEPARTMENT OF PAEDIATRICS

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

It is my privilege to submit the annual report of the Department of Paediatrics for the year 1958.

This has been another year of increased expansion for the Department of Paediatrics. As is apparent from comparison with last year's figures there have been 738 more admissions to the wards and the total number of out-patients seen has increased by 585. The number of beds in use have remained the same, namely 105. On Stations 36, 37 and 38 where there are 85 beds increased occupancy has necessitated increasing precautions to control the spread of infection. Originally three rooms with six beds were set aside as an isolation area, this has had to be increased to six rooms and some twelve beds. These are filled largely by new admissions. Thanks to the careful techniques maintained by the nursing and ancillary staff, and the scrupulous work of the cleaning staff, cross infection has been controlled. Above all we owe a lot to Dr. T. S. Wilson and Dr. R. D. Stuart and his staff for their weekly visits and advice, and for supervising detailed bacteriological checks. Station 24 continues to be used for long term and convalescent patients. Mr. J. J. Harrington and Mrs. D. Callan joined the staff this year and are teaching Grades IX-XII and I-VIII respectively. Their devotion to their work and the stimulus they bring is to be commended. Recreational facilities in the form of TV sets, programmes run by voluntary workers and the staff of the Occupational Therapy Department, films supplied through Mr. Robert Wright from the Department of Veterans Affairs have increased and are much appreciated. Daily visiting in the afternoons is allowed on all the paediatric wards and more recently an evening visiting hour has been introduced on Station 24.

Dr. W. C. Taylor has been promoted to Associate Professor of Paediatrics and is to be congratulated on becoming a Fellow of the Royal College. Dr. A. G. Stewart has joined the Department as Associate Professor and is engaged in full time basic research in the field of biochemistry. He has an office and laboratory space in the Research Wing. Dr. K. A. Swallow has been elected a Fellow of the American Academy of Paediatrics. Dr. Brenda Devlin has been a teaching Fellow in Paediatrics working mainly in the Department of Pathology. She is to be congratulated for passing the Certification in Paediatrics. Dr. G. M. Watkins has been Senior Resident and obtained her Dominion Councils of Canada. Dr. J. A. Reynar and Dr. J. A. Birkbeck have carried out their duties as Junior Residents in a most conscientious and efficient manner.

Members of the Department have given their time in committees and at ward rounds. Weekly Paediatric Ward Rounds are held at 11 a.m. each Tuesday. The titles of papers published, scientific addresses, research activities and sources and amount of grants are appended and from these it will be seen the Department shows increasing activity.

There were a total of 1,794 patients seen in the Out-Patient Department this year. New patients represented 461 of this total and 117 were admitted to the wards. The total admissions for the year were 2,625 and 2,590 discharges. There were 68 deaths with an autopsy rate of 94%. Approximately 50% of admissions were to paediatricians, 41% to general and specialty surgeons, 6% to the cardiovascular team and 4% to internists, dermatologists and psychiatrists.

In conclusion I would express my appreciation for the unfailing cooperation and hard work of the professional and administrative staff thus assuring the happiness and safe welfare of the children in the paediatric wards.

Respectfully submitted,

J. K. MARTIN, M.R.C.P.,

Director

MEDICAL STAFF -- UNIVERSITY

Fifth Row—Drs. A. Cairns, L. E. Beauchamp, A. M. Edwards, W. Forster, H. M. Barker, J. R. Huckell, K. A.
L. C. Grisdale, K. A. C. Clarke, W. D. Frew, E. G. Kidd, C. D. Elton, H. T. G. Williams, R. G. McCalla, D

Fourth Row—Drs. G. L. Willox, J. C. Callaghan, G. D. Brown, B. D. Margolus, G. L. Wilson, H. B. Armstrong, F. B. Ro
F. G. Ramsay, E. F. Donald, T. S. Wilson, S. S. Parlee, J. Dvorkin, A. B. McCarten, J. W. R. McIntyre

Third Row—Drs. B. Snell, H. Meltzer, C. R. Castaldi, R. S. Fraser, R. E. Rossall, G. D. Carson, J. Calder, C. B.
N. F. Duncan, B. Michalyshyn, J. R. Hilliard, H. Pascoe, W. C. Taylor, T. J. Speakman, D. F. Cameron,

Second Row—Drs. M. R. Marshall, J. K. Martin, R. D. Stuart, J. R. Vant, E. A. Gain, H. E. Duggan, P. H. Sp
Thomson, D. R. Wilson, E. Hitchin, O. Rostrup, R. G. Huckell.

First Row—Drs. S. S. Spaner, E. B. Quehl, B. J. Sproule, E. S. Allin, T. R. Nelson, H. F. W. Pribram, L. E. McLeod,

ALBERTA HOSPITAL -- 1959-60

. Monckton, G. K. Morton, J. R. Hemstock, A. H. MacLennan, W. A. Strutz, R. W. Robertson, R. J. Johnston, ie, C. M. Couves, W. D. Kyle, G. O. Bain, R. C. Harrison.

. L. Anderson, J. H. Stirrat, C. S. Dafoe, G. T. Moonie, T. C. Wilson, T. A. S. Boyd, L. B. Brown, J. Bugis, iott, S. E. Greenhill, J. O. Metcalfe, G. W. Cameron.

V. S. S. Armstrong, J. Guild, M. M. Cantor, K. A. Swallow, Y. Yoneda, M. M. Hutton, R. R. Francis, R. A. Macbeth, tle.

V. S. Hamilton, W. C. MacKenzie, A. C. McGugan, H. H. Hepburn, D. B. Leitch, J. J. Ower, R. E. Bell, R. K.

olmes, G. J. Conradi, J. D. M. Alton, M. T. F. Carpendale, R. S. Henderson.

PUBLICATIONS BY MEMBERS OF THE DEPARTMENT OF PAEDIATRICS—1958

MARTIN, J. K., *Stress in Children in Disaster.* Alberta Med. Bulletin, August 1958. (Also published in the Canadian Public Health Association Journal).

MARTIN, J. K., *Some Pediatric Pitfalls.* Winnipeg Clinic Quarterly. XI—No. 3. September 1958.

TAYLOR, W. C., *Neuroblastoma of the Adrenal Gland: Observations of the Hematological Findings and Treatment with Vitamin B12.* Alberta Med. Bulletin, August 1958.

STEWART, ALLAN G., *The Acid-Base Aspects of Extracorporeal Circulation.* Extracorporeal Circulation, Springfield, Thomas. 1958, 179. (with J. C. Callaghan, R. S. Fraser and J. Dvorkin).

GRISDALE, LLOYD C., STEWART, ALLAN G., and TAYLOR, W. C., *Unexplained Death from Exchange Transfusion.* J. Paediat. 52:694, 1958.

GRISDALE, LLOYD C., *The Alberta Perinatal Mortality Study.* Can. Med. Assoc. J., 78:256, February 15, 1958.

PAPERS PRESENTED—DEPARTMENT OF PAEDIATRICS—1958

DR. J. K. MARTIN, February 19th, 1958—*"Emotional Disturbances of Childhood"*—at the Red Deer Branch of the Alberta Medical Association Meeting.

February 21st, 1958—*"Rh Factor and ABO Incompatibility"* —Post-Graduate Course in Obstetrics and Gynaecology.

March 19th, 1958—*"Medicine as a Career"*—Presented to High School Students at St. Joseph's High School.

May 1st, 2nd and 3rd, 1958—*"Clinical Quiz"*, *"Medical Education"* and a *"Round Table Talk re Cerebral Palsy"*—Presented to the Meeting of the North Pacific Pediatrics Society, Vancouver.

May 27th, 1958—*"The Growth and Development of the Infant and Pre-School Child"*—Presented at a Panel at the Municipal Nurses' Conference, Edmonton.

September, 1958—*"Paediatric Panel—Endocrine Defects Affecting Growth"*—Presented at the Canadian Medical Association Meeting, Alberta Division at Lethbridge.

September, 1958—*"Manifestations of Nervous Disease"*—Presented at the Canadian Medical Association Meeting, Alberta Division at Lethbridge.

DR. W. C. TAYLOR, April 30th, 1958—*"The Present Role of Cardiac Surgery in the Newborn"*—Presented at Annual Refresher Course, Edmonton.

RD. ALLAN G. STEWART, June, 1958—*"The Estimation of Serum Calcium in Ultramicron Amounts of Serum of Plasma"*—Presented to the Canadian Society of Clinical Chemists.

DR. J. CALDER, March, 1958—*"Tuberculous Meningitis"*—Presented to Edmonton Academy of Medicine.

RESEARCH PROJECTS—DEPARTMENT OF PAEDIATRICS—1958

DR. J. K. MARTIN—

1. Controlled Study in the Use of Digoxin to Prevent Hyaline Membrane Disease.
2. Research in association with Cerebral Palsy Clinic of Edmonton.

Relationship of various obstetrical factors to the etiology and severity of Cerebral Palsy. (With Dr. J. Day.)

Dermal patterns in the child with Cerebral Palsy. (With Dr. M. Thompson.)

A study of enamel faults and its relationship to the time of cerebral damage. (With Dr. C. R. Castaldi.)

DR. W. C. TAYLOR—

1. A study of Cardiac Arrest During Exchange Transfusion in Rabbits.
2. Respiratory Rates in the Newborn Infant.

DR. ALLAN G. STEWART—

1. Enzymes in the Erythrocytes of Infants.
2. Electrolyte Studies in Exchange Transfusions.

SOURCE AND AMOUNT OF GRANTS—DEPARTMENT OF PAEDIATRICS — 1958

DR. J. K. MARTIN—Department of Public Health Research Grant—No. 608-7-10; No. 608-7-11; No. 608-7-12.

DR. W. C. TAYLOR—

1. Public Health Research Grant. No. 608-715—$1,500.
2. Medical Research Grant. No. 156. University of Alberta—$1,600.

OPHTHALMOLOGY AND OTOLARYNGOLOGY

Dr. A. C. McGugan,
Superintendent,
University of Alberta Hospital.

Sir:

It is my privilege to submit to you this report on the activities of the Department of Opthalmology and Otolaryngology for the year ending March 31, 1959.

All the members of our Department have continued to contribute to the teaching of nurses, undergraduate medical students, internes and residents.

In the past year five scientific papers were prepared by them and delivered at different medical meetings.

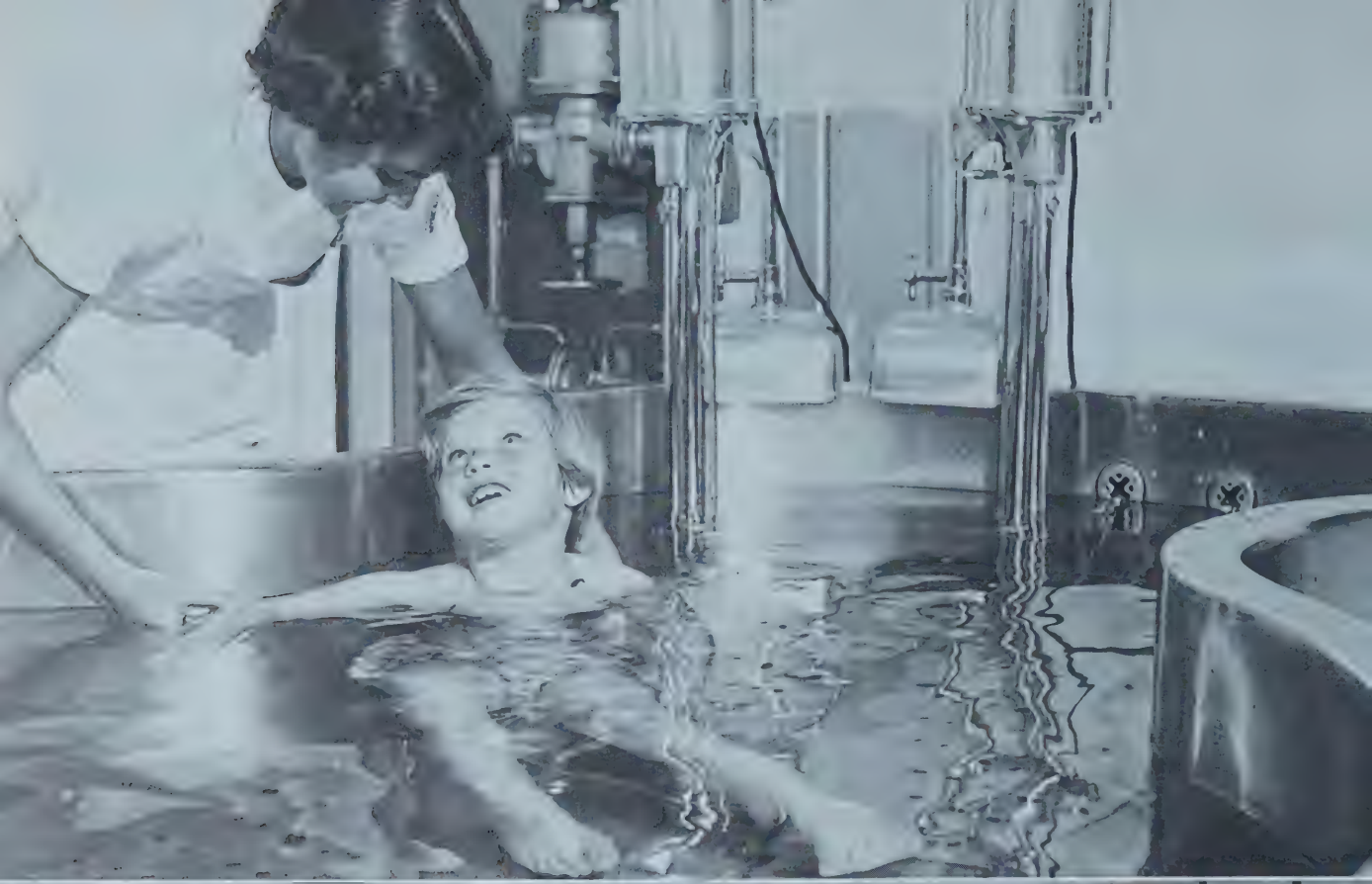
There has occurred in the past year an increase in the number of patients treated by us in the hospital wards, in the operating room and in the outpatient department.

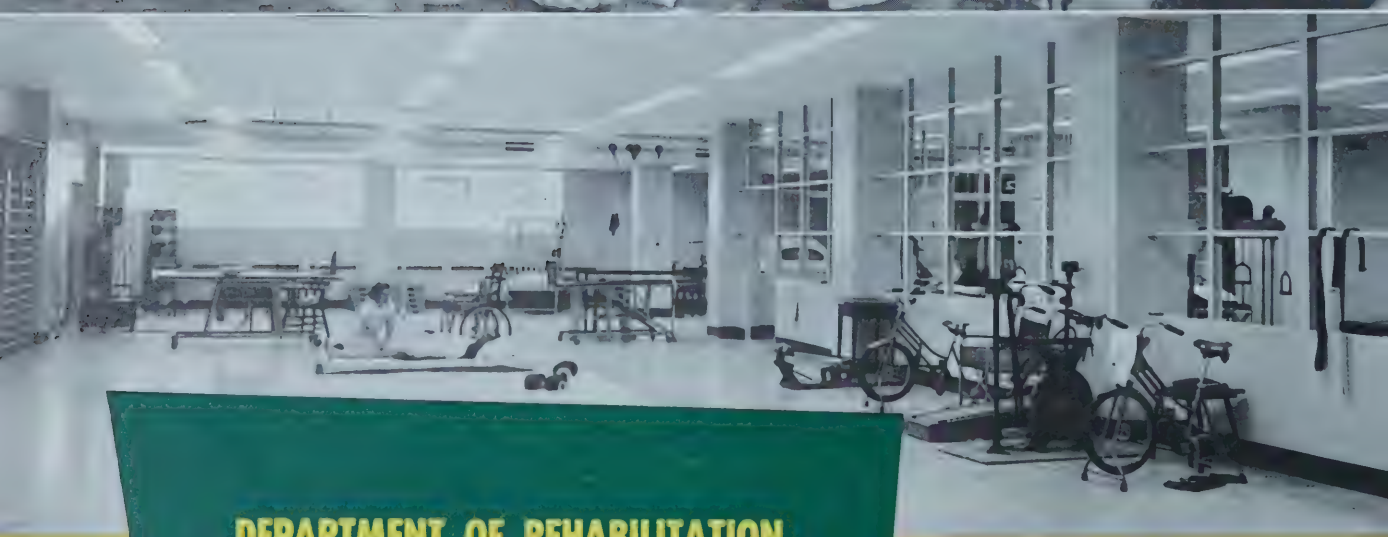
The Glaucoma Clinic has been functioning since the beginning of 1959. The number of cases which have already been referred to it for investigation indicate that it will become an active and useful division of our Department. If the demand for its services increases—and it is anticipated that it will—additional space, equipment and technical assistance will be required.

On behalf of all the members of our Department I should like to thank you again for your continued help and cooperation and also from all the members of your staff.

Respectfully submitted,

M. R. Marshall,
Director,
Department of Ophthalmology
and Otolaryngology





DEPARTMENT OF REHABILITATION

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

I have pleasure in submitting the annual report for the Rehabilitation Department for the year ending December 31st, 1958.

The past year has been spent trying to improve the standard of treatment and make the best use of the facilities available in the new department.

The opening of the Rehabilitation Ward (Ward 66) and Research have been the main new phases in this department in 1958.

Rehabilitation Ward

The Rehabilitation Ward (Ward 66) was opened at the beginning of the year. Here, shortage of experienced staff has been a problem in providing the type of service to be expected at the University Hospital. However, in spite of staff problems, figures show that this new ward has been able to help a large number of severely disabled patients.

From January 1st-December 31st, 1958, the following numbers of different types of patients were treated on the Rehabilitation Ward.

Cerebrovascular Accidents—L. Hemiplegia	7
R. Hemiplegia	10
Spinal Cord Injury—Paraplegia	19
Quadriplegia	7
Miscellaneous Rehabilitation problems	13
Total	56

Research

Dr. Carpendale has been engaged in a project—"To determine the effect of long wave ultra-violet and visible light on the rate of healing of superficial wounds". This has been made possible by the loan of a special high-pressure Mercury-Xenon lamp by the Mayo Clinic, and also by a grant of $1,340.00 by the Alberta Division of the Canadian Foundation for Poliomyelitis. This work has been carried out in the McEachern Cancer Research Laboratory.

Equipment

A life size section of a bus, including entrance door, steps, coin slot, and front seats, has been most generously provided by the Edmonton Transport Service. This has proved invaluable in the training of patients suffering from poliomyelitis, strokes, paraplegia, and amputees, in maneouvring in and out of the most economical form of transportation. We are most grateful to the Edmonton Transport Service, and especially Mr. D. L. MacDonald, Superintendent, for providing this magnificent and useful gift.

Education in Rehabilitation

In May, 1958, the department presented a demonstration of "Rehabilitation of the Hemiplegic", at the University of Alberta Refresher Course for General Practitioners.

In August, 1958, Dr. Adamson and Dr. Carpendale attended the International Northern Great Plains Conference on Rehabilitation, at Saskatoon, Saskatchewan. Dr. Adamson presented a paper on "Space and Equipment Needed for Rehabilitation Program", and Dr. Carpendale presented a paper on "The Education of Undergraduate, Graduate, and Post-Graduate Students in Rehabilitation".

Statistical Report

Physiotherapy and Hydrotherapy Section	1957	1958	Percentage Increase 1958/1957
Total number of treatments given	52,079	62,976	21% over
Total number of patients treated	4,378	5,420	24% over
Total number of polio treatments given	7,336	4,725	36% down
Total monthly average for polio patients treated	44	26	41% down
Remedial Exercise Section			
Total number of treatments given	17,008	27,832	63% over
Total number of patients treated	2,160	3,126	45% over
Occupational Therapy			
Total number of treatments given	14,729	17,736	20% over
Total number of patients treated	1,573	1,918	22% over
Total number of treatments given	91,152	113,269	24.2% over
Total number of patients treated	8,639	10,699	23.9% over

It will be seen from the Statistical Report that from 1957 to 1958 the over all number of treatments has increased 24.2%, and this mirrors closely the increase in patients treated of 23.9%.

All sections have shown an increase of at least 20% in the amount of work done. However, in the treatment of poliomyelitis, there is a decrease of 41% (from 44 to 26) in the total monthly average of polio patients treated. This continues a trend that has been evident for the past three years and probably reflects the number of long term polio patients that have been discharged from hospital and also the decreased number of new polio patients being admitted.

Summary

Since the move into the new department, the amount of work and the variety of work has increased enormously. We now handle more patients than any one single University Hospital in North America. This is good from the point of both service (more Rehabilitation facilities available) and teaching (more teaching material available). However, the increased size and stature of a department or a hospital carry increased responsibility. There is a responsibility to improve one's service to the increasingly complex problems that are seen as the patient load increases — and a responsibility to improve teaching facilities to make the best use of teaching material available.

These responsibilities can only be undertaken if adequate staff is available. This means not only adequate numbers of staff to handle the increased numbers of patients but new types of staff category to handle the increased number of special problems. In Rehabilitation this includes such categories as social workers, psychologists, vocational counsellors, orthotists, prosthetists, etc., plus, of course, an adequate number of specialists in rehabilitation. This is, of course, very costly, but to provide an adequate service it is essential.

Although in Rehabilitation our patient load is one of the largest in North America, our patient/staff ratio is the most disproportionate for any teaching hospital surveyed.

It is to be hoped that in the near future this situation will be remedied thus enabling the Rehabilitation Department of the University Hospital to assume its rightful place in the forefront of University Rehabilitation Centres.

Respectfully submitted,

M. T. F. Carpendale, M.D.,
Director of Rehabilitation

DEPARTMENT OF RADIOLOGY

Dr. A. C. McGugan,
Superintendent,
University of Alberta Hospital

Sir:

It is my privilege to submit the annual report of the Department of Radiology for the fiscal year ending December 31st, 1958.

Number of patients examined	27,669
Number of radiographic examinations	33,281
Number of large films used	86,100
Number of miniature films used	3,694
Number of fluoroscopic examinations	3,853
Number of patients for deep therapy	220
Number of deep therapy treatments	1,336
Number of patients for superficial therapy	442
Number of superficial therapy treatments	1,518

There has been about a ten per cent increase in the number of patients examined and in the number of radiographic examinations this year as compared to last year.

Dr. D. Gunn left the Department of Radiology on June 30th, 1958. Doctor J. T. Mason was reappointed for one year to the staff commencing July 1st, 1958.

The combined project of the Department of Physics, University of Alberta, and Department of Radiology, University of Alberta Hospital concerning the use of radioactive phosphorus in the treatment of Port Wine stains is continuing. About 35 patients have been treated to date with satisfactory results. The project on total body radiation from internally administered isotopes and dose to the gonads is being continued. A preliminary report is to be given to the Canadian Association of Radiologists in January, 1959.

Several papers were given by the Director of the Department, Doctor H. E. Duggan. The topics were: Results With Radioactive Isotopes, staff of the University Hospital; Treatment of Diseased Joints, Doctor G. Wilson, Doctor E. G. Kidd, and Doctor H. E. Duggan, Central Alberta Medical Association; Radiation Hazards, General Hospital staff; Acute Reticuloendotheliosis, Doctor J. W. Macgregor and Doctor H. E. Duggan, University of Alberta Hospital staff; Pulmonary Findings in Cardiac Disease, Doctor C. E. Holmes, Alberta Thoracic Society.

Mrs. D. Weijer, Physicist, is working full-time on projects arranged by the Department of Radiology and Radioisotope Laboratory. She was paid by the Alberta Division of the Canadian Cancer Society. Her remuneration in 1958 was $3,300.00.

The new X-ray apparatus for fluoroscopic image amplification and intensification was installed. This had a five-inch image amplifier. We found that the image was slightly smaller than was required. The Picker X-Ray Company have devised a larger image amplifier and this is to be installed in 1959. The Cineradiographic attachment will be installed at the same time.

Twelve patients received radioactive phosphorus and six patients received radioactive gold. In addition to this, the new probe for localization of eye tumors was used in three cases. This will be used more frequently as the technique is perfected. Five cases of cancer of the thyroid were treated with radioactive iodine. The radioactive strontium beta ray application was used frequently in the treatment of eye lesions.

May I take this opportunity to thank you and your staff for your excellent cooperation during the past year.

Respectfully submitted,

H. E. Duggan, M.D., F.A.C.R.,
Director,
Department of Radiology

DEPARTMENT OF PATHOLOGY

Dr. A. C. McGugan,
Superintendent,
University of Alberta Hospital

Sir:

The year 1958 has been marked by a number of important developments concerning the Department of Pathology.

Space has been allotted on the Surgical floor of the new wing of the hospital to the Department which will make it feasible to examine surgical tissues as they are removed in the operating theatres, and facilities have been provided for immediate examination of tissues by the frozen section technique.

Plans for a new morgue have been prepared, and it is hoped that it will not be long before adequate facilities will become available for the autopsy service of the hospital.

The new wing on the Provincial Laboratory of Public Health, will make feasible the further development of histopathological services to the University of Alberta Hospital, as well as to rural hospitals, so that more efficient and rapid reporting on surgical tissues will become possible.

The Work load of the Department continues to increase, as reflected in the statistics for the year 1958.

Surgical specimens examined numbered 5,911, an increase of almost 1,000 over the previous year. Malignant disease (cancer) was present in 9.6% of the cases.

Rapid diagnosis in the operating room, by the frozen section technique was done in 220 cases, an increase of 18 over the previous year. It is predicted that this service will grow rapidly with the provision of new quarters adjacent to the surgical theatres.

Autopsy examinations were carried out in 79.3% of the deaths occurring in the hospital, a figure which is amongst the highest in Canada. There were 434 autopsy examinations during the year, an increase of 60 over 1957.

In addition to service duties, the Department of Pathology, interested itself in the training program for internes. Ten young graduates, most of whom are proceeding to Certification or Fellowship in one or other of the specialties, spent a period of six months training in the Department of Pathology.

Dr. T. K. Shnitka, who completed his training in Pathology in the department last year, successfully completed the Certification examination of the Royal College of Physicians and Surgeons of Canada in Pathology, and on April 1st, 1959, was appointed Assistant Professor of Pathology on a permanent basis. Dr. Shnitka will be away on leave of absence from July 1st, 1959, to spend a year in research at John Hopkins University.

Dr. H. E. Christensen, completed the graduate training course in Pathology on July 1st, 1959, and will write Certification examinations of the Royal College of Physicians and Surgeons of Canada this

fall. Dr. Christensen is leaving the department to spend a further year of training at the Memorial Hospital in New York.

Dr. H. E. Bell enters the final year of training in Pathology on July 1st, 1959, and Dr. R. Swallow, in the third year of training in Pathology, will spend the next year with Dr. R. E. Bell in Clinical Pathology.

Dr. G. O. Bain, Assistant Professor of Pathology, is spending about one-third of his time in research and is presently engaged in bone marrow studies, under a grant from the Medical Research Fund of the University of Alberta.

A list of publications from the Department of Pathology during the past year are appended.

All of which is respectfully submitted,

JOHN W. MACGREGOR, M.D.,

Director,
Department of Pathology

PUBLICATIONS FROM THE DEPARTMENT OF PATHOLOGY
APRIL 1, 1958 - APRIL 1, 1959

1. SHNITKA, T. K., ASP, D.M., and HORNER, R.H.: *Congenital Generalized Fibromatosis: Cancer,* 11; 627, 1958.
2. MacKENZIE, W. C., NORVELL, Jr., S. T., MATHEWS, B. L., and SHNITKA, T. K.: *Islet Cell Tumours and Peptic Ulcers;* A Report of Two Cases of Zollinger-Ellison Syndrome: Conad J. Surg., 2; 6-15, 1958.
3. KOWALEWSKI, K., LYON, R. K., EDWARDS, G. E. and SHNITKA, T. K.: *Effect of Posterior Pituitary Extract on the Development of Post Histaminic Gastric Ulcers in Dogs:* Can. J. Biochem. Physiol., 36; 977-983, 1958.
4. BERTRAND, N.: *Stromal Hyperplasia of the Ovary:* Alberta Medical Bulletin, Vol. 1, 1959, pp 31-36.
5. SWALLOW, R. J.: *Optic Nerve Glioma:* Alberta Medical Bulletin, Vol. 1, 1959, pp 19-21.
6. ABBOTT, C. E. B., BAIN, G. O., and KOWALEWSKI, K.: *Effect of Radiothyroidectomy on Methylocholanthrene-Induced Sarcoma in the Rat:* Acta Endocrinologica 28, 537-539, 1958.
7. BAIN, G. O., M.D.; *Interpretation of Erythrocyte Osmotic Fragility in Various Clinical States.* A Review: Alberta Medical Bulletin 23: 74-81, 1958.
8. TAYLOR, W. C., M.D., Ch.B.; CHRISTENSON, A. H., M.D.; and BAIN, G. O., M.D.: *Neuroblastoma of the Adrenal Gland—Observations of the Hematological Findings and Treatment with Vitamin* B_{12}: Alberta Medical Bulletin 23: 109-114, 1958.
9. TOSHACH, SHEILA, M.A. and BAIN, GORDON O., M.D.: *Acquired Aortic Sinus Aneurysm Caused by Hemophilus Aphrophilus:* American Journal of Clinical Pathology 30: 328-335, 1958.
10. BAIN, G. O., ALLEN, P. B. R., SILBERMANN, O. and KOWALEWSKI, K.: *Induction in Hamsters of Biliary Carcinoma by Intracholecystic Methylcholanthrene Pellets:* Cancer Research, 19: 93-96, 1959.

DEPARTMENT OF CLINICAL LABORATORY SERVICES

Dr. A. C. McGugan,
Medical Superintendent,
University of Alberta Hospital

Sir:

It is my pleasure again to present the review of the work done in the Department of Clinical Laboratory Services for the calendar year 1958. Attached is a statistical review of the work done with a comparison to previous years. The statistics for the work done in the Provincial Laboratory in bacteriology and serology are given in unit values. The marked increase in these figures in the current year is almost entirely due to a revision of the unit values, whereby more units are given per test than in previous years. The increase in the work in all units must be attributed largely to the increase in beds with the opening of the polio and pediatric wing, and would have been greater had not a shortage of staff during the summer months necessitated curtailment of the work during this period.

The procedure for analysis of protein-bound iodine in serum which was developed late last year was brought into full operation during the year. It has proven to be of value in the diagnosis of difficult thyroid problems. About half the work done in this laboratory is on specimens sent from outside of the hospital and is providing a very useful out-patient service to the community. Measurement of the serum transaminases, the first method to be set up in the enzyme laboratory last fall, has had wide use. The results of our experience with these tests over a period of six months has been reviewed and published. Further enzyme analyses are under development. Our first Auto-analyser was put into service in February and has proved to be not only an instrument providing exceptional accuracy in analyses but permits us to do a considerably greater number of analyses for glucose and urea at less cost than has previously been possible. Further methods will be adapted to this semi-automatic system.

Some temporary space adjacent to the present laboratory was made available and will meet our immediate needs until we are able to occupy the new laboratories in the clinical services wing. Some space in this area was set aside for laboratory analyses on out-patients, of which an increasing number are being referred to this hospital. This work is now at a level that it requires one technician full-time.

Dr. Allan Stewart, who had been the hospital biochemist in this department, left to assume a post with the University of Alberta. An excellent replacement has been obtained, but was not available during the year under review.

The department has taken an active part in graduate and undergraduate teaching during the year. Regular rounds are held each week throughout the year to review laboratory aspects of interesting cases. Demonstrations and reviews form part of these rounds. We were fortunate also in having more detailed reviews of specific subjects given during the year. Dr. H. B. Collier, Consultant in Biochemistry, gave a series of lectures on red cell metabolism and Dr. Margaret Thompson, lecturer in genetics in the Department of Pathology, gave a series of lectures on medical genetics. Both these subjects are topics of very current interest. They were excellently attended and stimulated a great deal of interest. Dr. A. H. Christensen, the fellow in pathology, completed his year's training in clinical pathology. Dr. Harold Bell commenced his year's training in July. In addition, Dr. Ian Holmes of the Department of Medicine completed six months in the laboratory as part of his training in internal medicine and completed a study on the absorption of Vitamin B12. In addition, two junior members of the house staff spent three-month periods in this department part-time. One pathologist from the south of the Province spent a month in the radioisotope laboratory gaining experience in radioactive methods.

A laboratory for teaching common laboratory methods to medical students has been set up. It is staffed during the teaching year with an instructor from the University of Alberta. This provides the students with a much broader range of experience in doing laboratory methods and should give them a much better appreciation of their value, limitations, and application.

The laboratory technician training school is the principal source for technicians for the hospital. The staff shortage during the summer pointed up the necessity of expanding this program. We have taken steps to train a small number of laboratory aids to do limited type of work within the laboratory, conserving the trained technical staff for more difficult and complex procedures. This has proved to be of considerable help but can only be developed within certain limits. We have cooperated with the University during the year to establish a two-year course at the University of Alberta for training of medical technicians. The first class registered in the fall and will commence summer training in the hospitals next year. It is hoped that this will provide further supply of technicians for hospitals in the Province. From our own two-year training program, eight students were graduated during the year. An additional nine new students were enrolled in the course. A small amount of teaching space and an office was made available for technician training and serves as a temporary expedient until better space is available. We provided training for one technician in ultra micro chemical procedures sent to us from a city hospital, and also started an apprentice-training program for E.E.G. technicians.

The work in the radioisotope laboratory reached a level where a further full-time technician is now required. An apprentice-technician is under training for this work. A major advance in this laboratory has been the provision by the Alberta Division of the Canadian Cancer Society, of a research fellowship for Mrs. Dorothy Weijer as Radiation Physicist. She is engaged in studies on effects of radiation under the direction of Dr. H. E. Duggan of the Department of Radiology.

The work in the field of cardiac surgery has required special arrangements being made to supply blood for these cases, as this has reached beyond the scope of the regular Red Cross Blood Transfusion Service. Dr. D. I. Buchanan has joined the staff to take charge of a blood transfusion unit in the hospital to work out the blood transfusion problems related to these cases and carry out other studies related to the use of blood transfusion generally. Dr. Buchanan brings with him a wide experience in blood transfusion and blood serology.

As in past years the bacteriology and serology for the hospital have been done in the Provincial Laboratory of Public Health. This is an excellent arrangement in most respects, and makes available to the hospital the highly-qualified staff of the Provincial Laboratory. It has one major disadvantage in that the liaison between the patient, doctor, and bacteriology laboratory is poor. Steps will be taken when the service wing is available to improve this important liaison.

The following research studies were carried out in the department during the year:

1. *Evaluation of the use of S.G.O.T. in diagnosis*—Dr. J. Eidem and Dr. E. McDonnell.
2. *The value of routine serological tests for syphilis*—Dr. R. E. Bell and Mr. D. Miyauchi.
3. *Analysis of cobalt-60 vitamin B 12 absorption tests*—Dr. Ian Holmes.

The following papers were given:

"The Use of Chromium Survival Curves in the Study of Anemia"—Dr. R. E. Bell—presented at University Hospital Medical Staff Meeting.

"Use of Bone Marrow Biopsy in Diagnosis"—Dr. R. E. Bell — presented at Medical Refresher Course, spring, 1958.

"Panel on Liver Disease"—Panel composed of Dr. W. C. MacKenzie, Dr. H. Whiting, Dr. R. J. Johnston and Dr. R. E. Bell.

In addition, some further work was done in the project *"Anemia of Cancer"* supported by the Alberta Division of the Canadian Cancer Society.

I should again like to thank the members of the hospital administration for the excellent cooperation they have given us in solving our many problems during the year and also my appreciation to members of the laboratory staff for work done during the year, frequently under very trying circumstances.

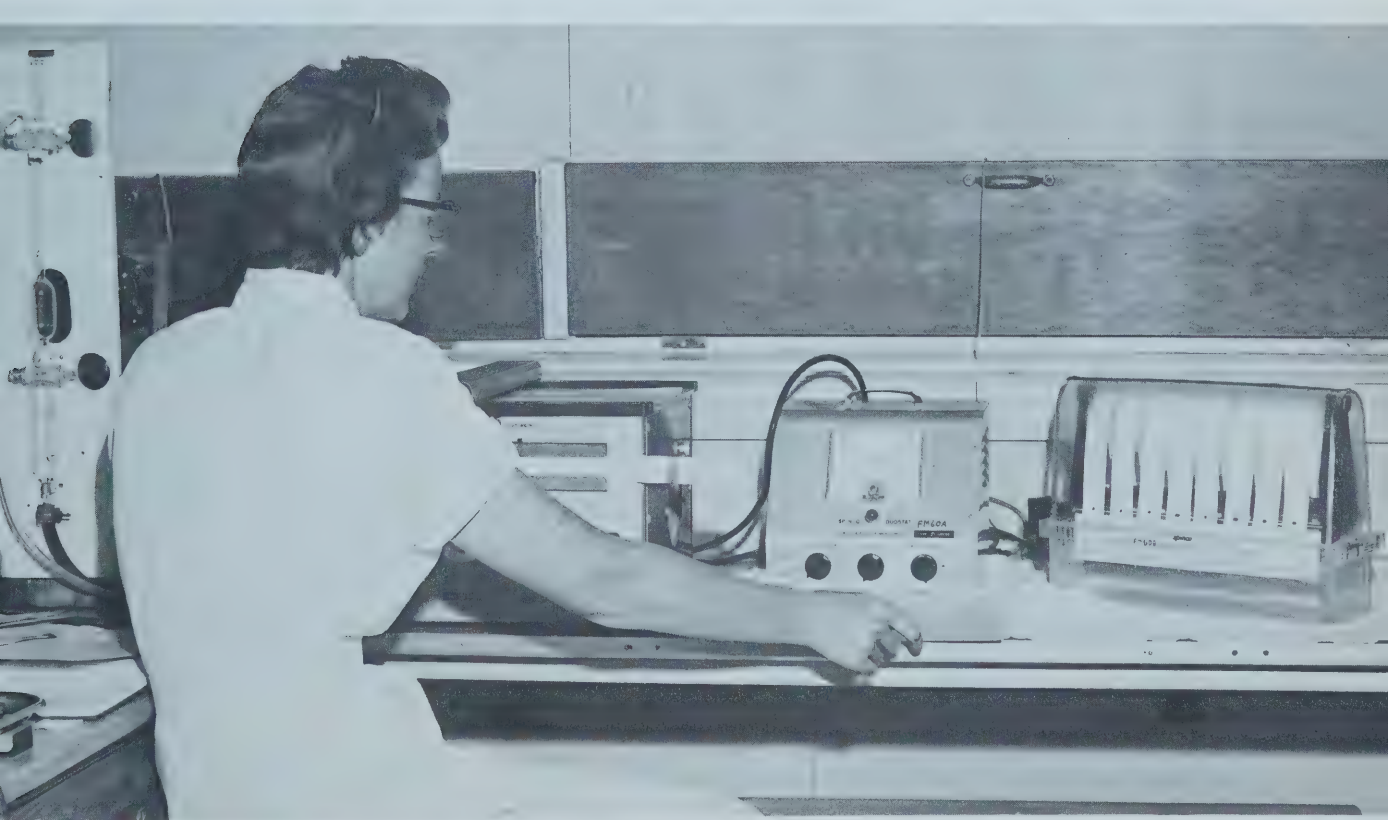
Respectfully submitted,

R. Edward Bell, M.D.,
Director,
Department of Clinical Laboratory Services

DEPARTMENT OF CLINICAL LABORATORY SERVICES

	1956-57	1957-58	1958
Clinical Chemistry	34,543	42,362	50,760
Urinalysis	43,839	35,185	39,172
Hematology	99,192	119,727	127,528
E.C.G.'s	4,130	4,771	5,247
E.E.G.'s	1,075	1,400	1,716
B.M.R.'s	738	757	778
Miscellaneous	3,320	4,223	5,155
O.P.D. Laboratory	3,414	5,516	7,373
	190,251	213,941	237,729
Red Cross Patients Transfused	---	---	2,371
Blood Used	---	---	6,149
Radioisotope Laboratory Thyroid Uptakes	924	961	1,035
Other Diagnostic Procedures	167	217	318
Hyperthyroid Treatment	93	109	91
Bacteriology and Serology (Provincial Laboratory)	76,870*	84,599*	182,780*

*Reported in unit values



SPECIAL SERVICES AND RESEARCH

Dr. A. C. McGugan

Superintendent,

University of Alberta Hospital

Sir:

It is my pleasure to submit the following review of the work in the nature of special services development and research done in the hospital during the year 1958. Unless otherwise noted, the work has been supported in all or in part by the Special Serices Grant.

During the year space for special services development and research was made available on the top floor of the south pavilion. This has resolved the space problem for the present time insofar as development of this type of unit is concerned.

Again, the work in the field of cardiac diagnosis and 'open heart' surgery has been the most significant achievement in the way of special service in this period. These units have passed the stage of development and can now be largely considered as functioning service operations. Further development, and research will, of course, be required to keep them fully up to date. A summary of the principle procedures done and a comparison with the previous twelve months is as follows:

	Mar. 31/57-Apr. 1/58	Jan. 1/58-Dec. 31/58
Cardiac catheterizations	129	212
Direct pressures at operation and left auricular pressures	91	51
Blood pH's	534	1, 093
'Open heart' surgery using bypass	35	62

The increase in the volume of diagnostic and surgical work done has required the provision of a second multichannel recorder. Equipment for dye curves used in the study of blood flow through the heart has been obtained and is being put into operation. Dr. J. Woods joined the staff of the unit as medical fellow in September and in addition to his regular duties in the unit, has initiated a project related to the study of the blood supply of the heart. During the year 45 of the cases which had 'open heart' surgery in the past returned for careful follow-up studies. These studies provide essential information on the effectiveness of the operative procedure done and permit a better evaluation of the long-term prognosis in the individual cases. Further development of the pulmonary section of the cardiopulmonary unit will be started in the coming year when a suitably qualified physician will be available to supervise it.

There were 62 'open heart' operations done requiring the use of extracorporeal circulation. This is almost double the number done in the previous 12 month period reviewed. The original bubble oxygenator was replaced during the year with an improved rotary disc type oxygenator. This has improved the procedure and permits the extension of types of cases amenable to surgical correction. Twenty-five of the cases were maintained on this machine. In addition to the diagnostic and surgical procedures requiring special techniques and skills and equipment, there is an equally important requirement of skilled post-operative care. To assure this, a special cardiac recovery room has been set up where all cases are followed through their post-operative period of recovery. A special nursing team has been trained to do the work in this unit which handles all thoracic, cardiac, and great vessel surgical cases.

The cardiac unit continues to maintain its position as a pioneer development in the forefront of this field of medical progress.

The use of limb perfusion in the treatment of cancer utilizing the pump oxygenator is under development by Dr. Cecil Couves who joined the staff in July. It is a new approach to the treatment of advanced cancer which offers some promise. With a grant from the Federal Government obtained

through the Department of Public Health of the Province of Alberta, a new experimental developmental unit for investigation of cardiac and respiratory problems in infants has been set up by Dr. Callaghan. Dr. Cordosa has been working in this unit as a full-time fellow in cardiac surgery. The space for the unit was provided in a converted nursery and comprises a small operating theatre, monitoring room and office, and a small laboratory. This unit will be in operation in the coming year.

The periphenal-vascular clinic under Dr. R. Macbeth has continued. Ninety-seven new cases were seen in the clinic and in addition 89 follow-up studies were made. The unit has undertaken a control study of some of the new drugs useful in the management of vascular disease in order to critically assess their value.

The program to develop a metabolic unit was the major new undertaking in special services during the year. This has been initiated by the Department of Medicine and is under the immediate direction of Dr. Lionel McLeod, a Markle fellow in medical research. The ultimate aim is to provide a unit in the hospital where careful metabolic studies to assist in the diagnosis and to follow the effects of treatment of metabolic problems can be undertaken. Part of this development is an extension of the present steroid laboratory, to encompass more intricate and precise determinations in hormone analysis. Support for the project was obtained from a block grant from the National Research Council of Canada. A unit of this type has been required for some years and will play an important role in clinical investigation here in the future.

The initial work has been related to the measurement of cortisone-like hormones in the blood. These are only present in very minute amounts and require very skilled analysis. This method has been applied to the study of the action of cortisone and adrenal stimulating hormone in various disease states. The analysis of the urinary estrogens has been set up and is being evaluated as a diagnostic and research procedure. Further method development and improvement of present methods will be undertaken.

A muscular dystrophy unit, which will be devoted to research on problems of diseases of muscle, was established under the direction of Dr. George Monckton. This is supported through a grant from the Muscular Dystrophy Association of Canada. Space for this unit was provided in the special services floor of the south pavilion. Work was started on the collection of case material for genetic studies in muscular dystrophy. Extension of the work to fundamental studies in muscle metabolism will be taken as competent staff becomes available.

The artificial kidney has been maintained in active operation in experimental work on renal function. It has been shown to have potential usefulness in the treatment of some types of drug and chemical intoxication. Two clinical cases requiring artificial dialysis were treated during the year.

Two other new investigative units were set up. The first is a unit for the study of gastric physiology under the direction of Dr. C. Harrison. This will permit application of the fundamental studies which were made under Dr. Harrison at the McEachern Laboratory to be applied on clinical cases. The second is a unit for the study of irreversible shock. This unit will provide a focus in the hospital where certain procedures useful in the study and management of shock cases will be available and also where materials required in treatment of such cases can be centralized.

The application of modern technological advances to medical problems in diagnosis, treatment, and research is in its infancy. We must anticipate a tremendous growth in this in the immediate future. The special services grant is a first step towards assuring that medicine in the University Hospital will keep abreast of progress.

It is noteworthy that partly through the stimulus of projects initiated under special services, substantial additional funds are being provided for research or development projects here through independent sources. The year has been a very successful one and the Committee look forward to continued and accelerated development in the future.

J. W. Scott, M.D.,

Chairman,

Special Services and Research Committee

SCHOOL FOR LABORATORY TECHNOLOGISTS

Dr. A. C. McGugan,
Medical Superintendent,
University of Alberta Hospital

Sir:

It is my privilege to report to you on the activities of the School for Laboratory Technologists of the University Hospital during the calendar year 1958. Eight students completed their two-year training course and received their gold pins and certificates from the University Hospital Board at the Graduation Exercises held in the spring. All of the eight students later qualified as Registered Technicians in the certification examinations of the Canadian Society of Laboratory Technologists. Six of these joined the hospital laboratory staff on graduation. One of our students, Miss Darlene Ostrum, received the two highest awards in these examinations, one for the highest standing in the practical examination, and one for the highest standing in the written examinations among candidates in the Edmonton area.

Recognizing the need for more laboratory technicians in the Province, more attention has been paid to recruitment and publicity of the course was increased in an effort to interest more high-school graduates in this field. The results were favorable as evidenced by the increased number of applicants. Ten students were selected to enter the training course during the summer and early fall. This, with the students proceeding into their second year, brought the number of students in training in the two years to eighteen. A number of students were also directed to the medical laboratory science course at the University of Alberta, a new course offered by the Faculty of Medicine for the first time in the fall of 1958. Members of the laboratory staff participated in instruction in the University course as sessional demonstrators in clinical pathology.

The teaching in the school is under the capable direction of Miss Jean Matheson, B.A., who is employed as full-time instructor in medical technology.

The standard of teaching has been greatly improved since Miss Matheson took over its direction. The instruction in the various laboratory sections is given by the senior technical staff working in these laboratories and requires a considerable proportion of their time. Teaching in bacteriology, serelogy and histology is done by the staff of the Provincial Laboratory during the student's rotation through that laboratory. We are grateful for the assistance they give us in this way.

Teaching facilities are almost non-existent but this will be remedied in the new services wing.

Yours sincerely,

R. Edward Bell, M.D.,
Director,
Department of Clinical
Laboratory Services

NURSING

Nurses' Residence

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

Again it is my pleasure to report to you the activities of the Department of Nursing for the period January 1, 1958 to December 31, 1958. You will realize that certain items included in this report are a repetition of items covered in our last Annual Report. This is the inevitable result of the change in the fiscal year from April 1-March 31 to correspond with the dates of the calendar year.

Members of the Department have continued to be active in the professional organizations. Miss Ruth Thompson, Associate Director of Nursing Education, as Chairman of the Committee on Nursing Education of the Alberta Association of Registered Nurses, has attended two Executive Meetings and the Annual Meeting of this organization. She has also attended one meeting of the Committee on Nursing Education of the Canadian Nurses' Association. As Chairman of the Committee on Legislation and By-laws of the Alberta Association of Registered Nurses, I have attended similar Executive Meetings and the Annual Meeting of this Association and also a meeting of the Committee on Legislation and By-laws of the Canadian Nurses' Association.

At the Annual meeting of the Alberta Association of Registered Nurses held in Banff in May, 1958, the staff was represented by seven graduates, in addition to the two members of the Executive. At the biennial meetings of the Canadian Nurses' Association held in Ottawa in June, 1958, the staff was represented by two nurses. This was the 50th Anniversary Meeting of the National Association and therefore of particular significance. Two members of the staff attended the Great Plains Conference on Rehabilitation held in Saskatoon during the summer.

The Canadian Nurses' Association is currently conducting a Pilot Project to Evaluate Schools of Nursing in Canada. I appreciated the willingness of the Administration to permit me to accept the invitation to act as a regional visitor for this project. This has necessitated my absence for one week while attending an orientation programme in Ottawa and for two further weeks while participating in survey visits in the Province of Saskatchewan. The outcome of this Project could have a marked effect on the future of nursing education programmes in Canada.

The following articles have been submitted for publication during the past year:

Lawrence, Joan—"*Traumatic Arthritis of the Hip*", The Canadian Nurse, July, 1958, pages 630-635. Miss Lawrence prepared this Case Summary while an intermediate student in the School of Nursing. It won second prize in the Macmillan Case Study Competition open to student nurses across Canada.

J. W. Hinson, J. M. Coleman, H. Cotter, A. M. Wilde and J. C. Callaghan, M.D., F.R.C.S.(C) —"*Open Heart Surgery Using Total Cardiopulmonary Bypass*", The Canadian Nurse, August, 1958, pages 726-732.

E. A. Gain, M.D.—"*Anesthesia for Open Heart Surgery*", The Canadian Nurse, October, 1958, pages 940-942. The editor of the Canadian Nurse Journal requested that we obtain this article as a followup to the article "*Open Heart Surgery Using Total Cardiopulmonary Bypass*". Dr. Gain very willingly and promptly responded to the request.

J. W. Hinson, E. E. Oleksyn, B.Sc., and C. S. Dafoe, M.D., F.R.C.S., "*Nursing Care of the Thoracic Surgical Patient*", The Canadian Nurse, March, 1959, pages 218-222.

Miss Frances Sikora participated in a panel discussion on Clinical Teaching at the Alberta Association of Registered Nurses' Annual Meeting and Miss M. J. Lees participated in a panel discussion on the use of the Volunteer at the Annual Meeting of the Associated Auxiliaries of Alberta. I presented

a paper, which I understand was subsequently published, at the meeting of the Society of Canadian Hospital Pharmacists in August and along with an applicant to the School I participated on a TV programme during the same month in the series "I Choose a Career". During October I presented a paper on the Pilot Project to Evaluate Schools of Nursing at the Annual Meeting of the Associated Hospitals of Alberta.

During May I represented this School at a meeting called by the President of the University of Alberta to discuss the feasibility of introducing a conjoint examination for graduation and registration. The subsequent approval of this plan by the Schools of Nursing in the province and by the General Faculty Council of the University of Alberta has resulted in the announcement that conjoint examinations will be inaugurated in August of 1959. Fall rather than Spring Graduation Exercises will also follow this change. When this proposal was outlined to our senior students it resulted in the request that permission be granted for Graduation Exercises to be held twice a year and we appreciate the acquiescence of the Hospital Board in this matter. The students who were to be graduated in January felt it would be too long to wait until October for their Graduation Exercises.

We have welcomed a number of visitors during the year. Staff members from the Calgary General Hospital have observed in the Central Supply Department, the Emergency Department and the Respirator Unit. In preparation for a promotion to the position of Supervisor of the Operating Room a staff member from the Archer Memorial Hospital, Lamont, observed for a month in our Operating Rooms. A Sister-tutor from Liverpool spent two days observing in our Teaching Department.

Mrs. Margaret F. Myles, author of the well known book "A Textbook for Midwives" visited the Obstetrical Department and brought real stimulation and refreshment to the Nursing Officers who had the opportunity of hearing her speak informally about nursing education in Britain and America.

In July we welcomed back a majority of the members of the graduating class of 1948. These Alumnae spent an afternoon at the hospital and at the residence and were appreciative of the opportunity to see the developments which had taken place in the last ten years.

Nursing Officers

Two senior positions were created during February of this year with the appointment of an additional Supervisor in the Paediatric Department and an additional Supervisor on the afternoon tour of duty in the Nursing Service Office. This brings to forty the number of senior nursing staff positions. Eight replacements were also arranged during the year so, in all, ten Nursing Officers were new in their positions during 1958. We are happy to say we had no difficulties in obtaining suitable replacements.

Three members of this group were granted leaves of absence to provide the opportunity for further study:

The Clinical Instructor-Supervisor in the Obstetrical Department completed a year at McGill University in Teaching and Supervision and resumed her position.

The Clinical Supervisor in the Nurseries completed a course in the Care of Premature Infants at the Royal Victoria Hospital, Montreal.

The present Supervisor in the Operating Rooms completed a course in Operative Aseptic Technique at the Johns Hopkins Hospital, Baltimore. We are most appreciative of the capable way Miss M. Seale handled the Acting Supervisor's position in the Operating Rooms until Mr. R. Coombs' appointment to that position and of the capable way Mrs. R. Messier handled the Acting Supervisor's position in the Emergency Department while Miss Seale was temporarily in the Operating Rooms.

We regretted that ill health necessitated Mrs. M. E. Macdonald leaving her position as Assistant Night Supervisor and Miss Winifred Anderson leaving her position as Supervisor in the Case Rooms.

Nursing Service

This has been a busy year again in Nursing Service. The opening of patient care areas was completed during the first quarter of the year as follows:

Nursing Station 66—on January 16, for patients under the Department of Rehabilitation Medicine.

Nursing Station 24—on February 26, for chronic and convalescent paediatric cases.

The Second ward of Nursing Station A and B—at the end of February, to accommodate veterans requiring Domiciliary care.

This leaves only the former Nursing Station 23 which is not occupied by patients. The Nursing Department has had to make adjustments in staff arrangements because the occupancy throughout the hospital has maintained at a higher level than in previous years.

For the first quarter of the year and for four weeks during the last quarter of the year, our number of full-time graduates was above establishment. For the remaining months of the year we were below establishment but our supply of part-time graduates helped to balance this. There is still considerable mobility in this group and it is difficult to maintain satisfactory rotation patterns and a satisfied staff when one has to work with varying numbers and frequently changing personnel.

Throughout the year we have been below establishment in Certified Nursing Aides. This deficiency has varied from a high of twenty-eight to a low of seventeen. You will recall that we reported in our last Annual Report the opening in February, 1958, of a second School in Alberta for the training of Nursing Aides. This School is located in Edmonton and we look forward with hope to the building up of our Certified Nursing Aide staff during 1959 once this School begins to make graduates available.

The University Hospital continues to provide clinical experience for a ten-week period for Nursing Aide trainees. These trainees now come to us from the Edmonton School rather than the Calgary School. We have indicated our willingness to increase the number of trainees handled from twelve to twenty and to ultimately handle thirty if so requested.

During the period March to May of 1958 we again offered to a selected group of four Certified Nursing Aides an in-service programme to prepare them to assume the duties of Operating Room Assistants. We continue to be well satisfied with the performance of this group.

Two graduate staff members were granted leaves of absence for educational purposes:

A Charge Nurse to attend a two-week course in Rehabilitation Nursing at the Rancho Los Amigos Hospital, California.

A general staff nurse to attend the five-month course in Advanced Practical Obstetrics at the University of Alberta. This staff member has returned to an Assistant Charge Nurse position in the Case Room.

The graduate nurse coverage has been increased upon the instruction of the Hospital Board in the Emergency Department and in the Anaesthetic Recovery Room and at the request of the Department of Nursing in the Mewburn Pavilion and in certain Specialties. We feel these changes have resulted in improved functioning in the areas affected.

We have had an active in-service education programme for groups within our own staff. In addition, Orderlies from Government House were included in our Orderly Classes and this seemed to work very well. The Charge Nurse on our Cardiac Unit was invited to participate in the staff education programme of one of the other city hospitals. Nurses in our Obstetrical Department have participated in the weekly classes which have been instituted for antepartum patients.

Nursing Education

1958 saw the largest graduating class in the history of this School of Nursing. The Graduation Exercises took place in the Northern Alberta Jubilee Auditorium and honored one hundred and five of our own graduates and four affiliating students from the Provincial Mental Hospital, Ponoka. This brings to twelve hundred and sixty-nine the number of graduates of this School of Nursing and to fifty-seven the number of Provincial Mental Hospital students who have completed two years of affiliation in general nursing at this school.

Three groups of students were admitted during the year, as follows:

A class of three affiliating students from the Provincial Mental Hospital, Ponoka.

A class of thirty-four students at the end of January.

A class of ninety-nine students at the beginning of September, of whom eighteen are registered in the degree pattern.

Registrations for the September class were closed at the beginning of June, though it was possible to admit a few late registrants after the Grade XII results were announced. This is the first year that we have been aware of a surplus of applicants with the necessary academic standing. No students were admitted who had written supplemental examinations and in only two instances were applicants admitted who had an overall Senior Matriculation standing below 60%.

There have been fifteen students terminate their programmes during the year for the following reasons:

To be married	10
Failure to attain a satisfactory academic level	4
Unhappy in Nursing	1

In drawing attention to marriage as the main reason for terminating we would add that eight members of the graduating classes in 1958 were permitted to complete their programmes as married students.

At the beginning of September, the affiliation agreement with the Royal Alexandra Hospital to provide isolation nursing experience for our students was terminated, due to a lack of clinical cases. This agreement had existed for over twenty-five years to our knowledge and perhaps longer. There has always been the most cordial relationships between the Nursing Administrations of the two Schools and we would wish to acknowledge our appreciation for this opportunity which the Royal Alexandra Hospital has afforded to many of our graduates.

In November of this year we completed the change in rotation to the Psychiatric Department which makes it possible for all of our students to have eight weeks rather than four weeks experience in this service. This was made possible with the transferring of Nursing Station 63 to the Psychiatric service from the Orthopaedic service. Ultimately with a further increase of patients in this service, we hope to be able to provide all students with twelve weeks of experience in Psychiatric Nursing which is a current trend, though not necessarily in this province as yet.

We have cooperated again with the University of Alberta School of Nursing in providing concurrent field experience for six of their students in Teaching and Supervision and with the University of Saskatchewan School of Nursing in providing terminal field experience for one of their students in Teaching and Supervision. The students in the first year of the degree programme in Nursing visited both the hospital and the Nurses' Residence during November.

We have found our relationships with the staff of the University School most cooperative and cordial. This was manifested particularly at the time of Varsity Guest Weekend when the staffs and students of both Schools sponsored "Open House" at the Nurses' Residence. The visitors, (approximately one thousand) were grateful for the opportunities afforded them to learn more about careers in Nursing and several have expressed this appreciation both verbally and in writing.

Just preceding Varsity Guest Weekend we provided guest speakers from the teaching staff and student body to attend the Career Days in the two South Side High Schools to discuss a career in Nursing and answer questions. These talks seem to be very favorably received.

The School was visited in June by Miss Marguerite Schumacher, the newly appointed Advisor to Schools of Nursing. We look forward to further helpful visits from her.

We regret to report the failure of one student in one paper at the April R.N. examinations and one student in two papers at the September R.N. examinations.

The students have been active in extracurricular activities. The choir has been under the direction of Mrs. Jocelyn Pritchard since September and again participated in the Rotary Carol Festival and at an evening Church service. The Vice-President of the University Students' Council for 1958-1959 is a degree student in her fifth year, Miss Joyce Aylen.

During the first year of operation, there have been six requests for loans from the Students' Revolving Loan Fund. Five were granted and one was refused. Two of the five loans granted have been repaid.

Nurses' Residence

After almost five years as an Assistant Supervisor in the residence, Mrs. Fern Graham retired at the end of the year and was replaced by Mrs. D. deLaroque. Mrs. Graham always displayed a great interest in the students and their activities.

During June the remodelling of the former Demonstration Room as a library was completed. This has greatly increased our library facilities and has added a most attractive area to our Teaching Department.

The lady house officers who resided with us on a temporary basis until the new residence was completed moved in July. The increased enrollment in the School and in the number of Nursing Aide trainees has resulted in almost complete occupancy of the residence.

A routine has been set up for regular inspections in the residence and it is the general reaction that the residence, under the Residence Supervisor and House Committee, is functioning smoothly. We would, however, be happy to see the students making increased use of the facilities available for social occasions.

Nursing Advisory Board

There have been two regular meetings of the Board and four meetings of the Executive.

The Board withheld its approval for presenting one candidate for graduation in May, though the candidate was afforded the opportunity to improve her record and thus be eligible for her pin and diploma before completing her programme in September. The student withdrew during May to be married.

At its fall meeting, the Board initiated action to establish sponsors for prizes in the fields of Medical Nursing and Psychiatric Nursing and to locate new sponsors for two prizes which would be discontinued by the present sponsors after 1959.

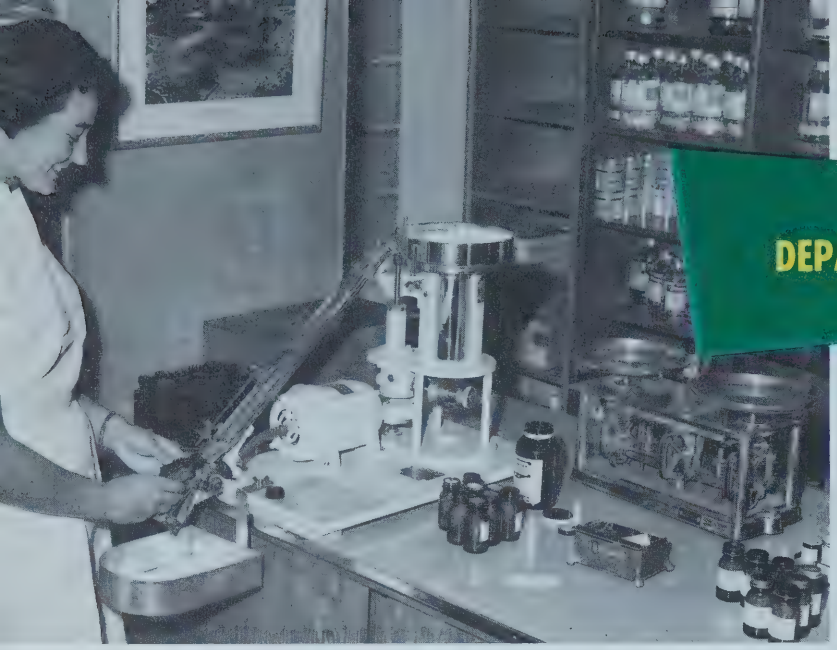
In preparing this Annual Report it has given us the opportunity to look backward and to look forward. We are grateful for the cooperation and assistance which has been afforded the Department this past year in its various activities. To the staffs of other Departments with whom cordial relationships have existed and to the Medical Staff for their individual and cooperative support we express our appreciation. We have enjoyed our association with the Alumnae of the School, particularly in planning the Reception following the Graduation Exercises and the Staff-Alumnae bridge to raise money for the new A.A. R.N. headquarters and with the Women's Auxiliary at the two Capping teas they have held in honor of our preclinical students. We have been most appreciative of the funds that have been made available through the Department of Public Health to afford training opportunities for members of the staff.

Finally we would wish to express our sincere appreciation to the Administration and through you to the members of the University Hospital Board for the patient and wise counsel and encouragement which we have always received. Although we can gain satisfaction from the progress of the past year at this time, we also look forward to the next year when we hope it will be possible to make further strides in our endeavors to improve patient care through nursing service and student standards through nursing education.

This report is respectfully submitted.

Jeanie S. Clark,
Director of Nursing

A clinical demonstration



DEPARTMENT OF PHARMACY

Dr. A. C. McGugan,
Superintendent,
University of Alberta Hospital

Sir:

It is my privilege to submit the annual report of the Department of Pharmacy for the year 1958.

The cost of supplies for the year is proportional to that of past years. Large quantity purchases have been carried out as in the past, resulting in a more stable cost structure. The inventory has been kept at a constant level so as to assure adequate stocks at all times.

A great deal of time was spent in finalizing our Formulary. Proof reading had to be carried out very exactly due to the fact that the printers were totally inexperienced in this type of publication. This formulary has been distributed to the various nursing stations of the hospital, and to all the house officers. With this distribution completed, the Pharmacy commenced to "wean" out various product duplications and product combinations that existed in Pharmacy.

Revision of the list of emergency night stock supplies is being carried out and will be available shortly. This is being carried out so as to have supplies available to House officers for patients' service after the regular pharmacy hours.

Establishment of a Ward Supply System from the Pharmacy has not been completed. It is felt that the system independent of nursing requisitions will overcome the stock shortages that exist.

The use of Emergency Drugs and Barbiturates record control to all nursing stations has proven a success. There has been no report of shortages of these drugs on the nursing station.

This department has carried out the teaching of Pharmacology to nursing students as in the past. Laboratory periods to 36 final year Pharmacy Students from the faculty of Pharmacy have also been carried out as in the past.

Members of the Pharmacy Department took an active part in establishing and completing a three day Hospital Pharmacy Institute, August 10, 11, and 12, 1958, in conjunction with the Canadian Pharmaceutical Association convention. There were 40 Pharmacists registered for the Institute, with classes being held at the Medical Building, University of Alberta.

The Director of this department is secretary of the Joint Pharmacy and Therapeutic Committee as established by the College of Psysicians and Surgeons together with the Associated Hospitals of Alberta.

Prepackaging equipment has made it easier to handle supplies. This system has greatly helped to speed up our service for floor stocks, and in filling prescriptions for patients. Many man hours are saved for

the hospital under this system. However, inadequate storage facilities for the prepackaged products prohibits a complete changeover to this system at this time.

Plans for the Out-Patient Pharmacy in the Service Wing are complete, and should offer adequate service to patients.

A summary of the work done, the costs during 1958, and the summary of the Antibiotics and Corticotrophic Hormone purchases is shown in the following table.

Respectfully submitted,

W. W. Maday, B.Sc.,
Director of Pharmaceutical Services

	1956-57	1957-58	1958
Prescription Supplies at cost	$101,527.19	$131,445.32	$143,302.17
Floor Drugs	10,334.02	12,291.51	2,112.81
Mewburn Pavilion	5,497.57	4,753.37	985.66
Case Room	3,865.64	3,397.01	2,505.84
Operating Room	14,157.68	15,051.86	16,092.05
O.P.D.	6,353.53	9,932.83	11,621.47
X-Raycopy	3,212.24	3,478.06	3,867.04
Cystoscopy	3,177.37	3,043.78	2,027.30
Obstetrics	2,578.32	2,111.17	587.24
Diet Kitchens	4,081.16	2,754.47	2,644.03
South Pavilion	496.46	733.57	164.76
Ground East	1,350.10	847.41	138.47
Laboratories	4,891.63	5,235.64	6,978.67
Emergency Unit	3,454.63	2,979.86	3,328.20
Small Departments	8,035.53	980.62	1,370.77
Liquor Purchases	1,825.60	2,546.30	3,950.50
Central Supply Room	------	3,295.65	3,503.39
Health Service	------	3,430.32	3,091.48
	$174,838.67	$208,308.75	$208,271.85
Stock Inventory	39,915.60	60,574.08	58,231.92
Stock Turnover	4.5	3.4	3.6
Prescriptions	108,892	128,824	70,697
Floor Emergency Supplies	------	------	3,960
Floor Requisitions	10,903	16,152	15,320
Small Departments	3,173	4,336	4,264
Antibiotics	84,430	88,243	86,290
Narcotic Requisitions	11,994	12,208	12,030
Daily Average	669	693	535

Compartive costs of antibiotics for the past three years.

	1956-57	1957-58	1958
Crystalline Penicillin	$ 6,046.00	$ 5,394.49	$ 5,136.00
Proc. Aq. Pen. 400 M.U.	2,198.00	2,671.05	2,113.00
Streptomycin	285.00	478.61	427.00
Pen. Proc. Aq./c Strep.	1,035.00	1,022.26	1,209.00
Neomycin	832.00	921.00	1,530.00
Bacitracin	207.00	707.00	637.00
Aerosporin	180.00	102.00	96.00
Chlortetracycline	278.00	483.97	414.00
Chloramphenicol	12,578.00	22,654.77	25,895.00
Oxytetracycline	4,065.00	3,378.46	1,700.00
Tetracycline	2,615.00	4,367.00	4,030.00
Erythromycin	3,282.00	3,012.00	1,839.00
Cortisone	2,033.00	1,330.00	956.00
Hydrocortone	2,647.00	3,868.00	4,375.00
Prednisone	4,490.00	5,365.00	6,095.00
"Varidase"	465.00	66.00	573.00
A.C.T.H.	575.00	946.00	677.00
Novobiocin	1,887.00	1,496.00	856.00
Oleandomycin	75.00	114.00	------
Prednisolone	------	1,174.00	1,049.00
Triamcinolone	------	444.00	2,147.00
Spiromycin	------	180.00	108.00
Ristocitin	------	2,072.00	1,052.00
Decamethasone	------	------	73.00
Amphoterin-B	------	------	99.00
Kanamycin	------	------	346.00
	$ 49,773.00	$ 62,247.61	$ 63,433.00

HEALTH SERVICE

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

I herewith submit the annual report of the Health Service for the fiscal year ending December 31, 1958.

A complete medical is given to all student personnel such as nurses, dietitians, pharmacists, x-ray and laboratory staff, internes and nursing aide trainees. A total of one thousand, five hundred and fourteen students were seen and treated for various illnesses in the Health Service and a further two hundred and seventy-six students were treated in the Emergency department by the Health Service residents. Two hundred and ten students were admitted to hospital for a total of one thousand and thirty-two hospital days.

A considerable portion of Health Service time is directed toward physical and mental assessment of prospective employees and students. A total of one thousand, four hundred and twenty-six physical examinations was done in the year 1958. Seven hundred and twenty-eight of these were pre-employment physical examinations. Eleven prospective employees were rejected for health reasons. Ten employees who left the hospital staff were listed as undesirable for re-employment due mainly to persistent time loss in these cases. One hundred and ninety-three pre-entrance and sixteen pre-affiliation physicals were done on prospective student nurses. One hundred physical examinations of student nurses completing their training were finalized. Three hundred and eighty-nine annual assessment examinations were completed on nursing staff.

Preventive services offered to the hospital staff in the year 1958 consisted of nine hundred and sixty-one Mantoux tests, of which one hundred and sixty-three were positive. Four hospital patients after admission were found to have tuberculosis. Ninety-seven staff personnel were exposed to these cases and were followed by Mantoux tests and x-rays. Typhoid immunization series (three injections) was given to three hundred and nineteen individuals and reinforcing doses to two hundred and two students and five hundred and seventeen hospital personnel. Salk vaccine was given to two hundred and thirty-three employees and twelve students. Eighty orderlies received Diphtheria toxoid in October, 1958.

The Health Service completed one hundred and forty-three hospital Employer Compensation Board forms with respect to injuries sustained by employees on the hospital premises.

I wish to thank Miss MacArthur, Mrs. Holmes, Mrs. King, Doctor I. Holmes, Doctor W. Buie, the staff consultants and all departments for their generous co-operation.

Respectfully submitted,

F. B. Rodman, M.D.,

Medical Director

OUTDOOR CLINIC

Dr. A. C. McGugan,
Superintendent,
University of Alberta Hospital.

Sir:

It is my privilege to present the Annual Report of the Outdoor Clinic for the year January 1, 1958, to December 31, 1958.

Patients treated at Clinic	3,183
New Patients admitted to Clinic	2,086
Patients' visits	14,367

Distribution of patients' visits
Med. 6,637, Surg. 984, Derm. 880, Ortho. 530, Neuro. 956, G.U. 67, Paed. 1,794, Obst. 1,214, Gyn. 366, Psych. 58, E.N.T. 256, Opth. 625.

Orders filled	13,306
Laboratory Blood Work	2,014
Urinalysis	1,519
Refractions	314
Physiotherapy	2
X-ray University Hospital	124
E.C.G. University Hospital	10
E.E.G. University Hospital	17
I.V.P. University Hospital	2
B.M.R. University Hospital	4
R.A.I. Uptake University Hospital	3
Cystoscopy University Hospital	1
X-ray X-ray School	85
E.C.G. X-ray School	17
X-ray Northgate Building	24
E.C.G. Northgate Building	2

Patients treated from City	6,893
Patients treated from City Relief	1,990
Patients treated from Province	4,461
Patients treated from Provincial Relief	1,023

Patients admitted to University Hospital ---------- 801

Med. 220, Surg. 77, Derm. 15, Ortho. 22, Neuro. 25, G.U. 9, Paed. 117, Obst. 190, Gyn. 47, T & A 39, E.N.T. 3, Opth. 25, Psych. 12.

Patients admitted to Royal Alexandra Hospital ---------- Med. 1

These statistics again show an increase in all departments to the extent that appointments are now being given for some of the busier clinics. This is working out quite well for both staff and patients and is partially alleviating the space problem in the waiting areas. The addition of a part time graduate nurse one and one-half days each week is improving the nursing service for the obstetrics and gynaecology clinics which are now being held on different days, again because of the problem of space. The continuity of patient care has been improved by the attendance of a resident interne for the medical clinics and enables the staff doctor to devote the majority of his time to teaching.

Medical studies have found that poor people run a considerably higher risk of mental illness than the rich and that poverty is the most important single factor in mental disease. This theory is dramatically borne out in this department. It is to be hoped that serious consideration will be given to providing more adequate psychiatric referrals. The attendance of a specialist in this field, if only for screening purposes, would be invaluable. The need for a trained social worker in this department is also becoming increasingly imperative.

The Women's Auxiliary has added two weekly magazine subscriptions for the waiting room to their usual donations of funds for emergency use and the Christmas treat for the children. Their generosity is very much appreciated.

Thanks also to the Junior White Circle which provides two complete layettes each month for needy mothers.

My sincere thanks to all Business and Administrative Departments for their continued interest and co-operation.

Respectfully submitted,

(Mrs.) H. Clare Carlyle, r.n,
Supervisor,
Out-Patient Department.

ACADEMIC SCHOOL

Dr. A. C. McGugan,
Medical Superintendent,
University of Alberta Hospital.

Sir:

The following report on the education project for hospitalized school children for the year ending June 30, is presented for your information.

During the year eighty-three pupils were registered in all grades—I to XII inclusive. Nine of these were long-term patients. The remaining seventy-four were pupils admitted as patients during the year, some of whom were still in hospital as of June 30.

The aggregate attendance was 2,795 days, or an average of approximately 38 days per pupil.

Following is the registration by grades:

Grade	No.	Grade	No.
I	8	IX	8
II	5	X	14
III	4	XI	5
IV	7	XII	1
V	2		
VI	4		
VII	8		
VIII	8	Total	74

Instruction methods varied to fit the needs of the individual. In my monthly reports I have described the system employed with the long term patients.

With the senior grades instruction was mostly individual or the coaching method, with frequent checks to help with difficulties and note progress.

As almost all children of the junior grades assembled in Station 24 the classroom method was used here. Children who reached the required age for entry were admitted to school. Pupils were graded, and those whose treatment covered a fairly extensive period were promoted as they qualified.

In all grades contact with the home or school was maintained whenever possible.

Respectfully submitted,

J. J. Harrington,
Senior Teacher

SOCIAL SERVICE DEPARTMENT

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

I am pleased to submit the Annual Report from the Social Service Department for the year ending December 31, 1958.

The Department has faced a challenging year in attempting to meet the requests for services, which have come to us from all units in the hospital. We saw an average of sixty new patients each month and the total case load was increased by eighty-nine over last year's figure. In 1958, eighty-six staff physicians referred patients to the Department, as compared with seventy-nine the previous year. The Social Worker also attended weekly ward rounds in the Rehabilitation Unit and monthly Pediatric Clinics on Nursing Station 24. Both formal and informal discussions were held with the nursing staff throughout the year, to help clarify the functions of the Department.

The needs of chronic patients still consume a great deal of time. In 1958, we transferred 127 patients to nursing homes or Homes for the Aged and Infirm. Despite the fact that several Homes were licensed last year, there are not sufficient beds yet to meet the demand. Consequently, the delay in discharging patients from the hospital often involves many weeks or months. We have also participated in placement of those patients, who, although unable to live independently, do not require institutional care. The Department visited and approved nine homes offering domiciliary care and forty-seven patients were discharged last year to boarding home accommodation. The lack of adequate custodial care for children with serious mental and physical defects constitutes a major problem. Facilities for this group, particularly for children under five years of age, are virtually non-existent. We do have six private homes, but they are not equipped to offer extensive nursing care.

We have met with many frustrations this past year due to a great gap in some areas of community resources. As a result, many of our goals in the rehabilitation process have fallen short of success. The two most complex problems confronting the Department are the lack of suitable housing for wheelchair patients and the difficulties encountered in employing the disabled. There is an urgent need in the community for a special employment liaison officer to stimulate employment of the disabled person in business and industry. We had 111 patients referred to the Department for rehabilitation services last year. Eight of these are presently taking correspondence lessons in matriculation or commercial subjects to increase their level of education, and sixteen are awaiting placement in employment by the Special Placements Branch of the National Employment Service.

The Polio Home Care Committee, under the chairmanship of Dr. J. Frank Elliott continued in its efforts to return more of our respiratory polio patients to their own homes. The Department of Public Health has approved the necessary respiratory equipment for these patients, two of whom have now been discharged from hospital. As soon as conditions in the home permit and suitable nursing or housekeeping held can be located, we are hoping to see a greater number discharged home on a permanent basis.

As in past years, the Department has received excellent cooperation from the Hospital Women's Auxiliary. Last fall, the Auxiliary voted $100.00 to this Department, to be used for needs of patients for which the community has, as yet, no resources. We have been advised that this amount will be supplemented as the need arises.

In addition to the services outlined above, we include the following statistics: Counselling to unmarried mothers and patients with family or marital problems—84; transportation arrangements—31; financial assistance—132; housekeeping services at home—4; discharge arrangements—32; and foster home placements—6. Discharged and deceased persons' effects and clothing released—358; number of patients approved under Department of Public Health Poliomyelitis Grant—138; and orthopaedic appliances ordered for poliomyelitis patients—297.

Respectfully submitted,

(Mrs.) S. Philip, B.A.,

Director

DIETARY DEPARTMENT

Dr. A. C. McGugan,
Superintendent,
University of Alberta Hospital

Sir:

I am pleased to make the following report of the progress of the Dietary Department for the period January 1st to December 31st, 1958.

During the year 1958 the following staff Dietitians resigned—Misses Wilma Bleakley, Dolores Oulton and Edith Stern. They were replaced by Mrs. Vera DeJaney, Mrs. Marion Harkness and Miss Kathleen Green.

Two Dietetic Internes completed the course in 1958, one staying on staff and the other going to the General Hospital. There were three internes commenced training in the fall of 1958. In addition to the regular series of classes conducted by the Director and the Staff Dietitians we have been most fortunate in having regular medical rounds provided for the internes by Dr. J. A. L. Gilbert and Dr. Gordon Brown. This has been a valuable addition to the course, and is much appreciated.

Our thanks also go to Miss Lewis, the Dietitian at Archer Memorial Hospital, Lamont. She has arranged for each of the Internes to have a month with her, and learn the workings of a small Hospital Dietary department.

The dietitians have been working with the dietitians from the other City Hospitals, on a new Diet Manual which we hope to have accepted in all the local Hospitals. A great deal of work and thought has been devoted to it, and we are grateful to the medical staff for their advice and guidance.

From the attached graphs it will be seen that there has been a marked increase in total meals, both patients and staff. There has been an increase of 1.44 cents in the average meal cost, which reflects the general rise of staple foods, details of which are noted on the chart included with this report.

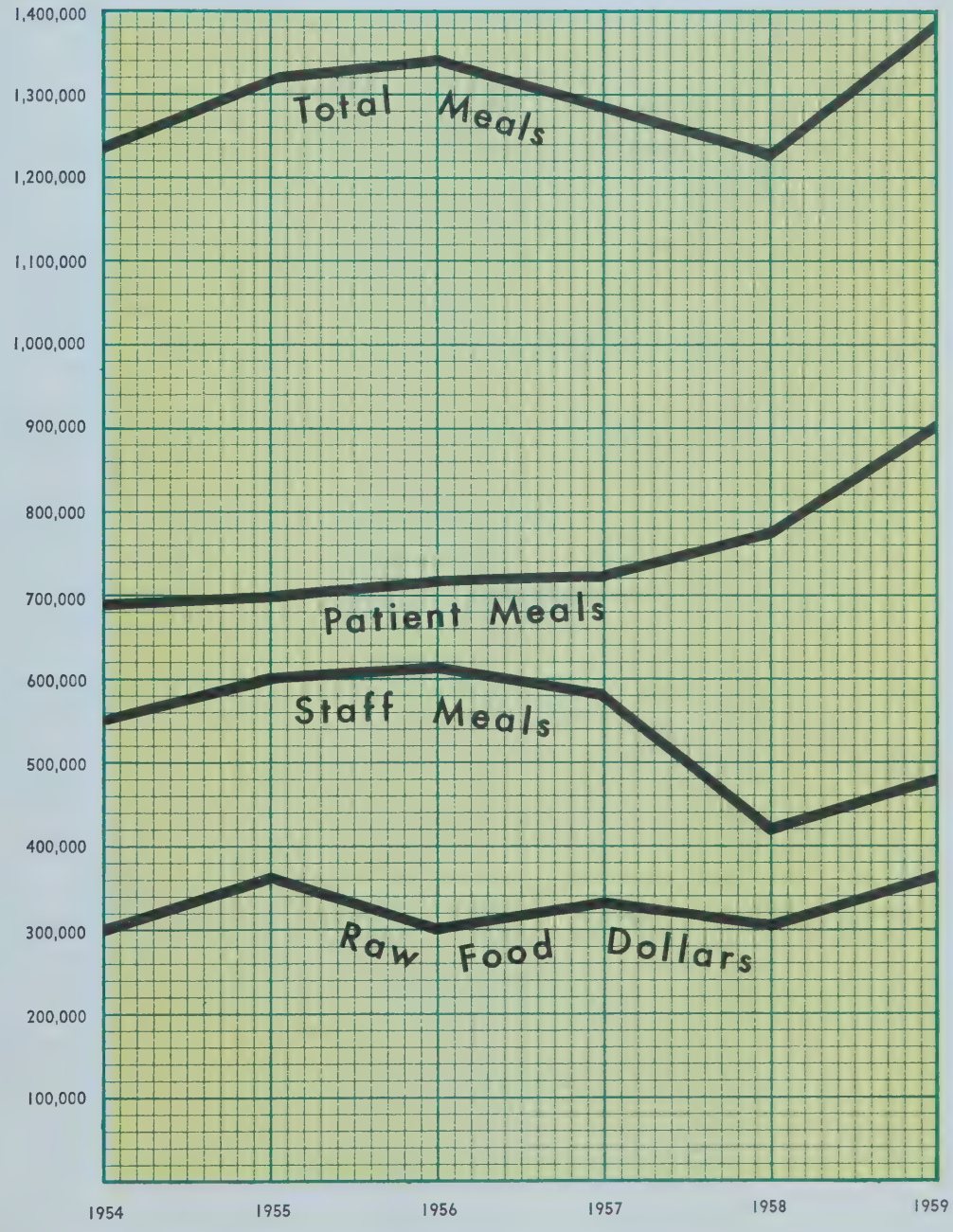
Respectfully submitted,

MARGARET G. LANG,
Director of Dietetics

UNIVERSITY OF ALBERTA HOSPITAL
COMPARATIVE MEALCOUNTS, FOOD COSTS
1953 - 1958

	1953-54	1954-55	1955-56	1956-57	1957-58	1958
MEAL COUNT						
STAFF	559,698	605,889	605,859	588,022	470,343	482,039
PATIENTS						
Full Diet	401,637	376,710	391,312	386,732	483,936	659,545
Private and Special	294,895	319,061	311,516	316,515	299,509	254,948
TOTAL MEALS:	1,256,230	1,301,660	1,308,687	1,291,269	1,243,788	1,396,542
RAW FOOD COST	$305,580.55	351,810.07	310,894.46	314,209.00	312,773.65	371,316.98
AVERAGE COST PER MEAL	24.03c	24.38c	22.82c	23.35c	25.14c	26.58c
AVERAGE PRICES—BASIC FOODS						
Meat, lb.	$ .3440	$ .3472	$ .3416	$ .3291	$ .3803	$ .4114
Turkey, lb.	.3754	.4245	.3511	.4229	.3577	.4466
Butter, lb.	.5937	.5721	.3832	.3871	.5369	.6424
Eggs, doz.	.4927	.4039	.4523	.4378	.3647	.3780
Potatoes, bushel	1.3045	1.6420	1.4423	1.4894	1.1271	1.4947

UNIVERSITY OF ALBERTA HOSPITAL



PERSONNEL DEPARTMENT

Dr. A. C. McGugan,

Medical Superintendent,

University of Alberta Hospital

Sir:

It is again my privilege to present the annual report of the Personnel Department.

During the year personnel establishment was increased from 1,127 to 1,233. Complement on December 31, 1958 was 1,138. Total expenditure for salaries and wages amounted to $3,431,253.53, an increase of $723,536.81 from the preceding year.

Turnover continued at a high rate during the year with a total of 697 separations from staff. A breakdown of establishment and turnover is shown below.

I was fortunate enough to receive a bursary through the Department of Health in the amount of $985.00, to enable me to secure a course in Hospital Organization and Management offered by the Canadian Hospital Association. The course was completed in June 1959.

Respectfully submitted,

J. L. PEDDEN,

Personnel Officer

July 24, 1959

	Budgeted Establishment 1958		Budgeted Establishment 1959		Terminations 1958	Personnel Complement December 31/58	
	Full Time	Part Time	Full Time	Part Time		Full Time	Part Time
Administration	83	—	83	5	35	81	5
Graduate Nurses	278	—	308	11	183	275	26
Certified Nursing Aides	80	—	80	—	30	60	1
Ward Clerks and Stenographers	23	—	27	2	11	27	2
Ward Aides	108	—	115	—	119	109	—
Orderlies	71	—	78	—	20	73	—
Nurses' Home and Internes' Quarters	29	—	28	—	9	26	2
Medical Records	20	—	23	—	12	23	—
Anaesthesia	1	—	2	—	0	2	—
Clinical Laboratories and Research	36	—	66	14	32	57	13
Pharmacy	10	—	10	—	3	10	—
Orthopaedics	3	—	4	—	0	4	—
Opthalmology	1	—	1	—	0	1	—
Rehabilitation	38	—	41	1	26	38	2
X-Ray	23	—	24	—	11	21	1
Dietary	121	—	133	11	88	132	12
Housekeeping	65	—	66	—	56	64	—
Janitors and Elevator Operators	32	—	35	—	10	36	—
Linen Repair	11	—	12	—	3	12	—
Laundry	55	—	55	—	38	47	—
Maintenance	39	—	42	—	11	40	—
	1,127		1,233	44	697	1,138	64

Medical Teaching—Part Time—Dr. Little
Dr. Wilson
Dr. Martin
Dr. Yonge
Dr. Huckell

Students—December 31, 1958

Student Nurses (U. of A. Hospital)	331
Student Nurses (Lamont Affiliates)	2
House Staff	68
Laboratory	17
X-Ray	7
Pharmacy	2
Dietetics	3

MAINTENANCE

Dr. A. C. McGugan,
Superintendent,
University of Alberta Hospital

Sir:

I hereby submit the annual maintenance report for the year ending December 31, 1958.

Painting: Our yearly program has been stepped up to take care of our expansion. Four floors of the 1950 addition were redecorated and we hope to complete the fifth and sixth, when our occupancy is not so high.

A start was made and 647 pieces of the original bedroom furniture in our Nurses' Residence were refinished as well as 80 rooms redecorated.

Other major jobs included:—Third floor South Pavilion, Sun Deck and Library in the Nurses' Residence, Pooley House and X-Ray Department.

Over 2,000 pieces of furniture or equipment passed through the Paint Shop to be finished or refinished.

Through the ingenuity of our Foreman Painter, Mr. H. Gardner, we now make our own "Scotch Lite" directional signs and applied the "Silk Screen" process to over 175 "Reserved Parking" signs.

Material Used: 175 gallons of enamel, 350 gallons of flat paint, 40 gallons of varnish and 100 gallons of laquers and shellac.

Janitors: Establishment is 37, an increase of 2. One for the New Interns Residence and one for the O.R.

A central room was established for cleaning and disinfecting Venetian blinds, and pull shades.

Equipment and Furniture: Thanks to Mrs. E. Armstrong the equipment depot is proving very satisfactory and through her efforts we have increased, improved, and centralized equipment necessary for "Isolation Technique".

Furnishings and equipment for the Interns Quarters amounted to $56,545.28.

Round Bed curtaining was installed in the Col. Mewburn Pavilion.

I would like to thank all of the Departments for their co-operation and will appreciate any suggestions for more efficient and helpful service.

Respectfully submitted,

Ellis Rose,
Maintenance Co-Ordinator

CARPENTRY

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

It is my pleasure to present the annual report of the "Carpenter Shop" for the year ending December 31, 1958.

During the year our staff has been consistent at 7 carpenters and 3 utility men.

To give a resumé of the work done in this Department only some of the larger items will be mentioned.

We started the year by making larger narcotic cupboards for all nursing stations, there being so many new drugs carried, the old ones were inadequate.

A new library finished in Oak was added to the Nurses' Residence.

The X-Ray Department received several alterations, plus a new film storage area in the Mewburn Basement.

A large Sun Deck was built on the roof of the class rooms at the Nurses' Residence.

The Isolation Nursery in Paediatrics was re-vamped.

A start was made in the Psychiatry Department towards making it conform more with the rest of the Hospital. The seclusion section was made into Doctors' Offices, and Consulting rooms were provided. It is planned to have all the windows changed to a standard type in the near future.

In July the new Interns Building was opened and a considerable amount of work was done prior to this, such as making and installing bookcases, incinerator, laying out parking lot and incidentals.

When the Interns moved then the third floor of the South Pavilion became vacant. The entire floor was remodelled and made into Doctors' Offices and Laboratories for Research. At the end of the year there were seven Doctors' Offices and eight Laboratories, with five more Laboratories to be completed when allocated.

Utility and service rooms were provided in Station 41.

A nursery in the Obstetrics section was converted into an Infant Heart Surgery Operating Room.

The Glaucoma Clinic was established on the second floor of the 1950 addition, and three Steroid Laboratories were located in the Metabolic Unit.

This along with smaller projects, such as making equipment, minor alterations, and maintenance have kept this department quite busy.

We thank the administration and all Departments for their kind support and co-operation.

Respectfully submitted,

J. S. Gibson,

Carpenter Foreman

ENGINEERING & LAUNDRY DEPARTMENTS

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

I submit herewith the annual report of the Engineering Department for the year ending December 31, 1958.

During the past year the following work has been completed:

1. The changing and renovating of dressing and utility rooms on Station 41.
2. Installation of No. 500 Picker X-ray Machine.
3. Installation of X-omat film developer in X-ray Department.
4. Installation of two hot water tanks in the Nurses' Residence.
5. Installation of fresh air and exhaust fans in the basement of the Polio Wing.
6. Modification of nursery on Station 33 into an operating room for Dr. Callaghan.
7. Installation of street lights and wiring of parking lot at House Staff Residence.
8. Installation of garbage burner at House Staff Residence.
9. Rewiring and overhauling of plumbing in the Pooley House.
10. Installation of water booster pump in the Polio Wing.
11. Renewal of sewer lines, additional water, air, and gas lines for the renovation of the old house staff quarters in the South Pavilion into eleven laboratories for Dr. Bell.
12. Continuation of wiring in the 1912 and 1929 additions.

Utilities used during 1958 were:

Steam	88,720,000	pounds
Water	11,615,460	cubic feet
Power	4,791,751	k.w.h.

At present all equipment is in good repair and giving satisfactory service.

I would like to take this opportunity to thank you, and all departments, for your cooperation during the past year.

Respectfully submitted,

R. Roberts,

Chief Engineer

Dr. A. C. McGugan,

Superintendent,

University of Alberta Hospital

Sir:

I submit herewith the annual report of the Laundry Department for the period January 1 to December 31, 1958.

The amount of linen washed, dried, and ironed in the twelve-month period was—

3,031,850	lbs flat work
166,975	lbs. starch work
for a total of 3,198,825	lbs.

This is an increase of 608,025 lbs. over the preceding twelve months, and is the largest increase in laundry processed in any previous year. This is, of course, due to the increase in patient days.

The laundry is operating at full capacity at all times, and if one major machine should break down it would seriously curtail the linen supply for the whole hospital. The new laundry should be erected and completed with larger capacity machines as soon as possible so as to assure the hospital of a good linen supply at all times.

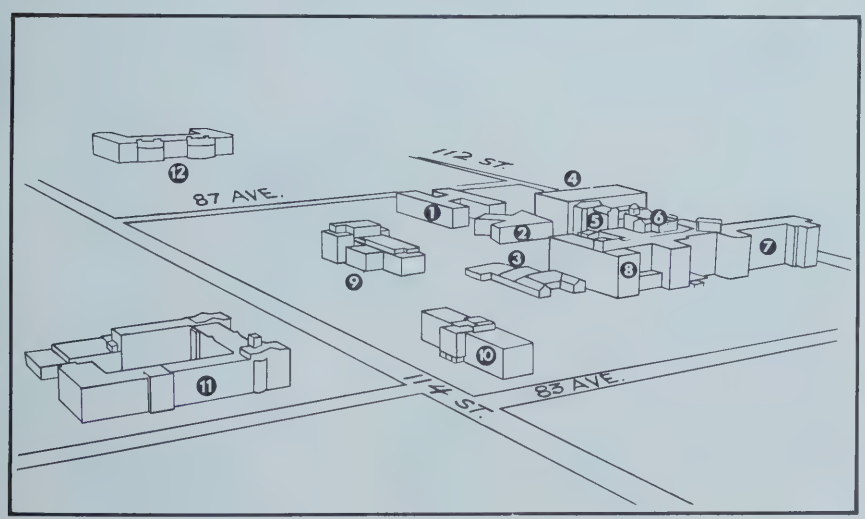
I wish to thank all departments for their cooperation in the past year.

Respectfully submitted,

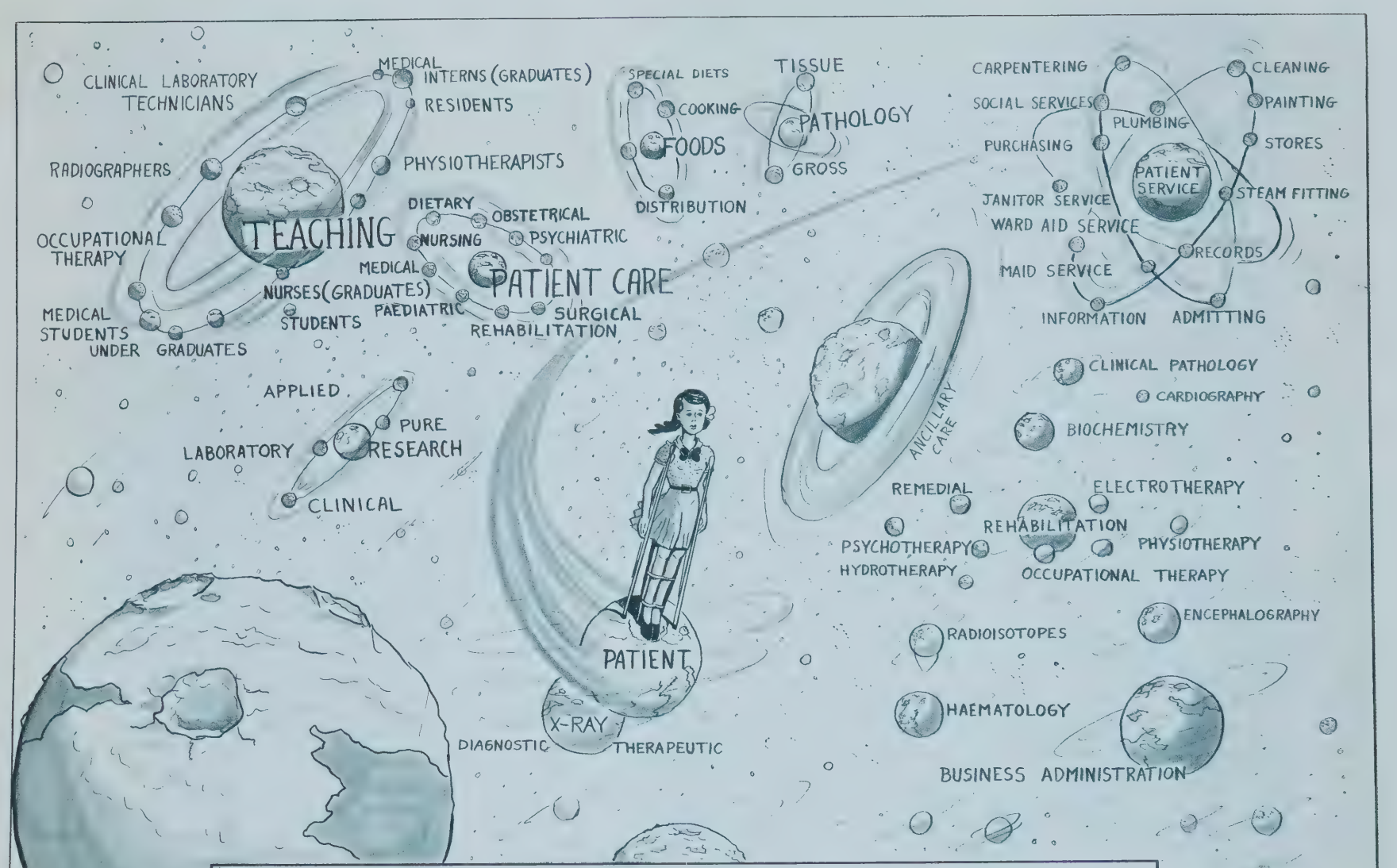
DANIEL SCHNEIDER,
Laundry Manager

Clinical Services Wing—nearing completion

Aerial View, University of Alberta Hospital 1958



1. Mewburn Pavilion
2. South Pavilion
3. Provincial Cancer Clinic
4. Service Building (under construction)
5. Original Hospital (1913)
6. 1930 Addition
7. 1951 Addition
8. Rehabilitation Addition 1957
9. Public Health Building
10. House Staff Residence
11. Nurses' Residence
12. Medical Building, University of Alberta



THE HOSPITAL UNIVERSE

THE PATIENT is the centre of the hospital universe. All services revolve around care and service. Patient service may be classified as direct (to the patients of to-day) and indirect (teaching and research) (to the patients of to-morrow).

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HOSPITAL